

Towson State College Bulletin

1971-1972



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TOWSON STATE COLLEGE



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TOWSON STATE COLLEGE BULLETIN

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"Glen Esk"

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DR. JAMES L. FISHER, *President*

THE COLLEGE

PHILOSOPHY

The Towson program rests fundamentally on the idea that a liberal education is indispensable for the preservation of a free society. Secondly, it rests on the belief that the means of acquiring special competence should be available at the undergraduate level in a tax-supported multi-purpose college.

These two principles go hand in hand. If it is vital that all students take on the mental habits and values necessary to thoughtful citizenship, it is also important that every student be able to acquire a sense of professional direction. The curriculum is designed, then, so that all students will pursue those studies—the traditional arts and sciences—that promote critical thought about man and his environment; and so that each student may discover and cultivate a particular intellectual or occupational bent.

OBJECTIVES

In order to implement its philosophy Towson State College seeks to challenge every student:

1. To make college life a model community which breeds a sensitivity to the dignity of others and is relevant to the needs of the ongoing society.
2. To develop an appreciation of and respect for the inherent wisdom and values of the past through knowledge of the discoveries and art forms of his own and other cultures.
3. To use this knowledge selectively and objectively in the search for new knowledge.
4. To develop an understanding of himself in relation to others in his community, the nation, and the world.
5. To develop the skills necessary to prepare himself to assume the role of a responsible member of the professional, social, and intellectual community.

HISTORY

Towson State College, the oldest and largest of Maryland's public colleges, traces its history back to 1865. At that time the General Assembly of Maryland

established a state-wide public school system and authorized the first state teacher training institution, The Maryland State Normal School, later known as the State Teachers College at Towson, and since 1963, Towson State College.

Formally opened in Baltimore on January 15, 1866, the Normal School was, for many years, the only institution devoted exclusively to the preparation of teachers for the public schools of Maryland.

The School occupied three different locations in the city of Baltimore before moving to its present suburban location in 1915.

In 1946 the arts and sciences program was introduced at Towson. Beginning as a two-year transfer program, it was extended to a four-year, degree-granting program in 1960.

A graduate program for elementary school teachers leading to the Master of Education degree was inaugurated in 1958.

In 1963 the College was authorized, by action of the Legislature, to expand its offering in the arts and sciences while maintaining a strong program in teacher education and to change its name from State Teachers College at Towson to Towson State College.

In 1965 the College expanded its graduate program to include offerings for guidance counselors and secondary school teachers.

In 1966 the College completed 100 years of service to the State, having graduated more than 12,000 students during its first century.

ACCREDITATION

Towson State College is accredited by the Middle States Association of Colleges and Secondary Schools, the Maryland State Board of Education and the National Council for the Accreditation of Teacher Education. The College is a member of the American Council on Education and is approved by the American Association of University Women.

BOARD OF TRUSTEES

The College is governed by a nine-member Board of Trustees — eight members appointed by the Governor for nine-year terms — and the state superintendent of schools, a permanent member, *ex officio*. This same board also controls the five other state colleges.

Created by the General Assembly of 1963, the Board was a recommendation of the Commission for the Expansion of Public Higher Education in Maryland and replaced the State Board of Education as the College's controlling agency.

THE CAMPUS AND FACILITIES

The College is situated on a campus of nearly 300 acres located a mile and one-half beyond the northern border of the city of Baltimore.

Within an eight-mile radius of the campus are all the cultural advantages of the city of Baltimore — the Peabody Conservatory of Music and Library, the Enoch Pratt Free Library, the Walters Art Gallery, the Baltimore Museum of Art, and the many theaters and other cultural centers necessary for a well rounded college experience.

The rolling wooded Towson campus is one of the most beautiful in this part of the country.

Campus buildings and facilities give excellent support to the various College programs. The following are of particular interest:

1. Stephens Hall, the original academic building, erected in 1915, houses most of the administrative offices, the auditorium and some classrooms. This Jacobian building with its clock tower has become a landmark in the Baltimore area.
2. The Albert S. Cook Library has well-developed holdings in the arts and sciences and teacher education. Towson's long history of teacher education is reflected in the extensive collections of bound volumes, reference works and periodicals in this field as well as substantial holdings in microfilm and microcard.

The collections of curriculum materials, textbooks, trade books and audio-visual aids are particularly noteworthy. A large addition several times the size of the original library was opened to college community use in September 1969. The original building will be used by Audio-Visual Department and the Library has moved to the new building.

3. Van Bokkelen Hall is a classroom building for the departments of art and mathematics. In addition, it contains recording and listening rooms for the Speech and Drama Department, piano practice rooms for the Music Department and display areas for the Art Department.

4. Linthicum Hall, completed in 1967, is the largest classroom building on campus housing the departments of English, modern languages, history, geography and education. Many faculty offices are also located here. On the ground floor is the College Book Store.
5. Smith Science Hall was first occupied in the fall of 1965. Included in the building are biology, chemistry, physics and science education offices, classrooms, laboratories and special function rooms such as student and faculty work and preparation areas. The Watson-King Planetarium is on the top floor.
6. Lida Lee Tall School, a laboratory school of grades K-6, greatly facilitates field studies of schools and children. It is now being operated as a Learning Resources Center.
7. Burdick Hall, the new Health and Physical Education building completed in 1968, houses three gymnasiums, olympic size swimming pool, classrooms, various training and dressing rooms.
8. Residence Halls: Newell Hall, Scarbrough Hall and Prettyman Hall are presently designated for housing women students. Richmond Hall, Ward Hall and West Hall are presently designated for housing men students. A total of 750 students are housed in the six residence halls.
9. Health Center: The building contains on the lower level a foyer and waiting room, offices for the physician, examination rooms and a physio-therapy room. On the upper level are 19 beds, separated into men's and women's pavilions, each with private baths. This level is provided with an exit designed particularly for ambulance service. The Counseling Center is also located on the upper level.
10. Glen Esk, the President's home, is located on the northern part of the campus. The large house is surrounded by some rare trees planted years before the College acquired the Towson site.

FUTURE DEVELOPMENTS

Located in one of the fastest growing areas of the country, Towson State's enrollment is increasing rapidly. By 1971 an enrollment of approximately 6,000 (Day Students), 5,000 (Evening Students), including 2,000 (Graduate Students) is expected. By 1975 an enrollment of 10,000 (Day Students), 7,000 (Evening Students), including 5,000 (Graduate Students) is projected. A summer school enrollment of 7,000 is expected for 1970 and projected to reach 10,000 by 1975.

A new Fine Arts Building, Student Union, Administration Building, Maintenance Building, and two Residence Halls, are scheduled for early construction. In advanced planning stages are the addition to the Science Building and a classroom building.

ADMISSION

Admission to Towson State College is granted to all applicants whose academic and personal qualifications give promise of success in the College. Because of limited facilities, the College reserves the right to close admissions when no further space remains. It is therefore advisable for high school students to make their college choice at the close of their junior year or early in their senior year.

Students seeking admission should file applications during the first semester of the senior year. Priority for admission will be given to those whose applications and admissions material are received by March 1. Admission for February is limited to students with advanced standing (over year or more of college work completed). No application for February admission will be accepted after November 15. All admission material for February entrance must be received by December 1.

Applicants with excellent records are granted admission on the basis of high school work completed, with the condition that the remaining high school work will be satisfactory. Candidates for admission to Towson State College are strongly urged to complete a college preparatory program in high school.

The following are the admission requirements established by the Board of Trustees of the State Colleges:

1. Admission to the State Colleges shall be determined without regard to race, color, religion, or sex.
2. Admission: High school graduates
 - A. Admission shall be granted to graduates of high schools on the basis of grades, rank, admission test scores, and such other evidence, including the recommendations of appropriate high school officials, as may be deemed indicative of the ability of the applicant to complete a course of study in college leading to a degree.
 - B. No admission offer shall be made prior to receipt of a candidate's scores on the admission tests administered in the candidate's senior year or subsequent thereto, except as herein provided. Early admission may be offered to not more than a maximum of twenty percent of the anticipated enrollment in the freshman class. Such an offer shall be made only to an applicant of demonstrated superior scholarship and promise, as evidenced by his record through the junior year and by his performance on the admission tests administered in his junior year or subsequent thereto.

- C. The tests to be used for admission purposes shall be the College Board Scholastic Aptitude Tests, effective with applicants for admission in September, 1967.
- D. Admission prior to graduation from high school shall be conditional upon completion of the high school curriculum in a manner that would qualify the student to admission under paragraph A.
- E. In the evaluation of academic credentials no preference shall be granted as between residents of the State, upon the basis of their places of residence.
- F. Completion of a college preparatory curriculum shall not be a condition of admission. High school graduates who have not followed a college preparatory curriculum, but whose grades, rank, and aptitude test scores indicate the potential to complete a college degree program, shall not be denied admission on that ground.

3. Admission: non-graduates of high school

Admission shall be granted to applicants who are not high school graduates on the basis of high school equivalence examinations, the admission test scores, and such other evidence, including the recommendations of appropriate persons, as may be deemed indicative of the ability of the applicant to complete a course of study in college leading to a degree.

4. Admission: Out-of-state

A maximum of fifteen percent of the total student body at each college may be composed of out-of-state students and foreign students not resident in Maryland. However, the college will be expected to meet its obligations to qualified resident students before approaching the maximum enrollment of out-of-state and non-resident foreign students.

5. Foreign Students

- A. A foreign student not resident in the United States shall receive the same schedule of fees as a Maryland resident, provided, however, that he shall not receive free tuition in the teacher education program.
- B. All foreign student applicants will be required to take the Test of English as a Foreign Language which is administered by the College Entrance Examination Board.

6. Admission: Determination of residence

In order to be considered a resident of Maryland for any given semester, it is necessary that:

- (1) The applicant shall have been domiciled in the State of Maryland for at least six months immediately preceding the registration date for that semester.

- (2) The applicant, his parents, the person(s) in loco parentis, or the applicant's husband or wife, shall have been bona fide tax-payers to the State of Maryland for the six months immediately preceding the registration date, or shall be qualified voters at that date.

A person stands in loco parentis to a child when he has put himself in the situation of a lawful parent by assuming the obligations incident to the parental relation without going through the formalities necessary to legal adoption. The determination of such status will be on a case by case basis. The College will look to who has custody or control of the child, who is financially supporting the child, and who has assumed general responsibility for his welfare. Residential status shall be determined at the date of registration for each semester.

7. Admission: Advanced undergraduate standing

- A. An applicant for advanced undergraduate standing must present from a college or university regionally accredited or accredited by the Maryland State Department of Education, the last that he attended, a transcript and record showing he left in good standing. Credit shall be allowed for all courses that approximate the requirements of the particular college, or, if not offered at the college, are approved by the appropriate department of the college, or, in the absence of an appropriate department, by the Admissions Committee of the college. No transfer credit shall be allowed for courses in which the applicant has earned a "D" or "F" grade. In all cases the applicant must spend the final year "in residence" at the college as a full-time student. Exemption from the preceding requirement may be granted on an individual basis by the Standards Committee, except that in no case shall transfer credit be allowed for courses in which the applicant has earned a "D" or "F" grade.
- B. It is the policy of the Board of Trustees that every effort shall be made to facilitate the transfer of graduates from the public community-junior colleges of the State of Maryland to the State Colleges. Such graduates who have pursued a transfer program and who have achieved an Associate in Arts Degree within four semesters in the case of full-time students, or the equivalent in the case of part-time students shall have priority over other transfer applicants for upper class standing. The equivalency of their credits shall be given a liberal interpretation. Nothing in this paragraph,

however, shall be construed to allow transfer credit for courses in which the applicant has earned a "D" or "F" grade.

- *C. Every student must meet the general education requirements, departmental requirements and earn 128 credits in order to graduate. Students transferring from a four year institution can transfer a maximum of 98 credits of acceptable work. Junior or community college students can transfer a maximum of 64 credits of acceptable work.
- D. Transfer credit will not be given for correspondence courses or for U.S.A.F.I. or military courses. Transfer credits will not be given for courses taken at a college or university which is not accredited by its regional association or the Maryland State Department of Education.

8. Admissions: Veterans

Any recently discharged veteran, eligible for G.I. benefits who has a high school diploma or equivalency will be admitted regardless of their previous academic record. Applicants should follow the regular admission procedures as outlined for freshmen, however, they will not be required to take the S.A.T. examination. In addition, veteran applicants should submit a copy of their Form DD 214 as verification of military service. Veterans who have had college level work since their discharge must apply for admission as a transfer student. Priority for admission will be granted to veterans who are residents of the state of Maryland. Admission for out-of-state veterans will be on a space available basis.

ADMISSIONS PROCEDURE

1. An applicant may secure an application form from the guidance office of the secondary school or from the Admissions Office of the College.
2. The applicant should complete the personal part of the form and forward it with the application fee of ten dollars to the Director of Admissions. The Secondary School Record should be given to the high school counselor immediately upon submitting the application to the College. The high school counselor will complete this record and forward it to the Director of Admissions. The transfer applicant, in addition, should arrange to have forwarded an official transcript of his college work.
3. The standardized test required for admission is the Scholastic Aptitude Test of the College Entrance Examination Board. The applicant should arrange to have forwarded to the Director of Admissions the results of this test. Students should take the test in their senior year of high school (either the November, December, or January administration).

*For specific details regarding this policy contact Secretary of the Academic Standards Committee or Director of Admissions, Towson State College.

ADVANCED PLACEMENT AND ADVANCED CREDIT FOR ENTERING STUDENTS

The College does not wish students to repeat work already taken. Entering freshmen who have had the opportunity for advanced work may receive advanced placement (and in some cases advanced credit) for this work.

During the summer prior to registration or during the opening week, freshmen take placement tests in various fields, and registration is based on the results of these tests.

Students who would like advanced credit as well as advanced placement are required to take the Advanced Placement Tests of the College Entrance Examination Board in May of the senior year of secondary school. In addition, students wishing to continue studying a foreign language should arrange to take the Language Listening Examination along with the Advanced Placement Tests. The results of these tests are received by the College about July 15. They are reviewed, along with grades in these subjects, by the departments concerned, and when appropriate, placement and/or credit is granted. Prior to final registration students are notified about advanced placement and credit. Additional information may be obtained by contacting the Director of Admissions at Towson State College.

A bulletin of information about the Advanced Placement Tests may be secured from the College Entrance Examination Board, P. O. Box 592, Princeton, N. J.

THE PLEDGE TO TEACH IN THE STATE OF MARYLAND

Maryland students applying for admission to the teacher education program who wish to be exempt from paying tuition may sign a pledge to teach two years in Maryland public schools immediately following graduation unless temporarily released by the State Board of Education.

Such students who, for any reason, cannot teach immediately upon graduation are expected to secure a deferment or a release from the President of the College.

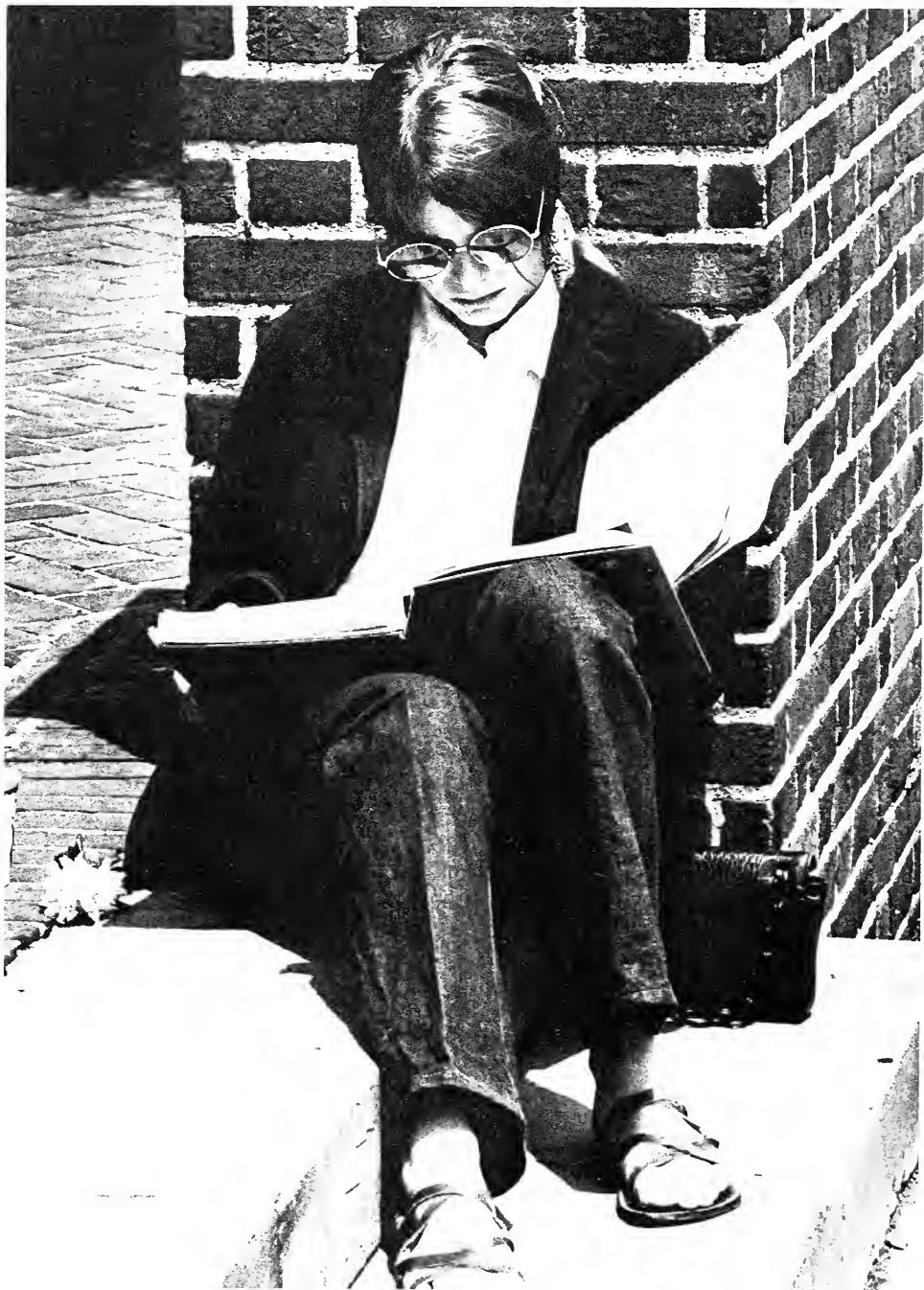
Deferments may be granted for a period of one year for reasons deemed valid by the President. A release from the pledge to teach is granted only upon payment of tuition.

A student who, upon graduation, does not teach and does not obtain a release or deferment shall have an obligation to repay the State the amount of tuition waived during the period of attendance.

Students who do not wish to sign the pledge must pay tuition.

EVENING PROGRAM AND SUMMER SESSION

Information pertaining to these programs may be obtained by referring to the Evening College Bulletin or the Summer Session Bulletin.



EXPENSES

TUITION

Maryland residents who register for the teacher education program are relieved of paying tuition if they pledge at least two years of teaching service in the public schools of Maryland upon graduation.

Those who enroll in the arts and sciences program, and those in teacher education program who do not sign the pledge to teach, pay \$100 per semester tuition.

For out-of-state students the tuition is \$225 per semester for enrollment in either the arts and sciences or teacher education program.

Special students (normally those who register for less than 12 semester hours) in the regular session, and all summer and evening session students pay \$25 per credit hour each semester for undergraduate and \$35.00 per credit hour for graduate work.

Tuition charges and fees are subject to change at any time by action of the Board of Trustees.

HOUSING AND BOARDING COSTS

Students who live on campus pay \$495 for room and board for the academic semester. For all students who live off campus and who have been approved as resident students, the cost for meals varies for the academic semester. A five day meal plan, and one without breakfast is also available upon request.

As residence space becomes available, those students who are eligible to reside in residence will be requested to room in one of the halls. For those students who enter the residence hall after the beginning of a semester, the charge will be prorated for the remainder of the semester plus one week.

Rates for living expenses are subject to change by the Board of Trustees.

OTHER FEES AND EXPENSES

A comprehensive fee of \$87.50 is charged each full-time student each semester. The yearly fee is \$175. This includes fees for student activities, athletics, college center, registration, and curriculum costs.

A limited number of lockers are available upon request at the Business Office for student use. The College assumes no responsibility for personal property placed in the lockers. There is an annual \$1.00 locker fee and a fifty-cent gymnasium locker fee.

A graduation fee of \$15.00 for those receiving a bachelor's degree and a \$30.00 fee for those receiving a master's degree, plan A (with thesis) \$30.00, plan B (without thesis) \$25.00.

Dormitory students are assigned individual mail boxes. Each student shares a mail box with one or more students. There is a fee of \$1.00 per student for the mail box per semester.

A student is expected to buy the textbooks for his courses. They may be purchased in the College Bookshop. Students are required to buy gymnasium suits for the courses in physical education.



A late registration fee of \$5.00 is charged to any student who does not pre-register as prescribed.

A late change of course fee of \$5.00 is charged to students for making student-initiated changes in their academic schedule.

Evening and summer students are charged \$25.00 per credit hour and a \$14.50 comprehensive fee for each semester.

Fees may be changed and new ones imposed at any time by action of the Board of Trustees.

Students in teacher education who have signed the pledge to teach and are subsequently placed on academic probation are not eligible for tuition exemption until their probation is lifted. They are required to pay \$100.00 tuition for each semester under probation.

EXPENSES FOR MARYLAND RESIDENTS

Teacher education students who sign the pledge to teach

	Semester I	Semester II	Total for Year
Day Student Comprehensive Fees	\$ 87.50	\$ 87.50	\$ 175.00
Room and Board	495.00	495.00	990.00
Total Boarding Students	\$582.50	\$582.50	\$1165.00

Arts and Sciences students and teacher education students who do not sign the pledge to teach:

Comprehensive Fees	\$ 87.50	\$ 87.50	\$ 175.00
Tuition	100.00	100.00	200.00
Total Day Students	\$187.50	\$187.50	\$ 375.00
Room and Board	495.00	495.00	990.00
Total Boarding Students	\$682.50	\$682.50	\$1365.00

PAYMENT OF FEES

All checks or money orders should be made payable to Towson State College for the exact amount of the charges. All fees are due and payable at the time of registration. No student will be admitted to classes until such payment has been made. A late fee of \$5.00 is charged when a check given in payment of fees is returned by the bank.

ADVANCE PAYMENTS

Each applicant must pay a non-refundable application fee of \$10.00 and no application will be processed without this fee or a valid waiver.

A deposit of \$25.00 for room reservation is required of all applicants who are eligible to live on the campus because of living outside the commuting boundaries. This fee is applied to the final amount of room and board due at the time of registration.

The above room deposit is refundable if the student cancels his application and notifies the Admissions Office, in writing, prior to June 30 for those entering in September and prior to December 15 for those entering in February, or if the College denies admission to the applicant.

All advance payments are sent to the Admissions Office.

LIABILITY FOR UNPAID TUITION

A Maryland student enrolled in the teacher education program who pays no tuition because of signing a pledge to teach in the State, is liable for unpaid tuition if he voluntarily withdraws from the teacher education program before graduation.

If he leaves before graduation or transfers to the arts and sciences program, he will be billed at the arts and sciences tuition rate for the education he obtained at the College.

He may be released from the above tuition payment if he transfers to a Maryland institution which has a teacher education program approved by the State Department of Education and if he reaffirms his pledge to teach for two years in the Maryland public schools upon graduation.

REFUNDS ON WITHDRAWAL

A student withdrawing from the College must complete an official withdrawal card and file it in the Registrar's Office before he is entitled to any refund. Refunds are made on the following basis:

A. Students withdrawing from the College after completing registration shall not be entitled to the refund of any fees other than tuition, board, and room.

B. Students who withdraw within two weeks after registration shall have tuition payments refunded minus \$10.00. Payments for board and room shall be refunded on a pro-rata basis by adding one week to the period of residence.



- C. Students who withdraw after two weeks but prior to the middle of the semester shall be refunded for the number of weeks not attended less one week on a 15 week basis.
- D. Students who withdraw after midsemester shall receive no refund for tuition, board, and room.
- E. Students called for military service during the semester should apply for refunds on an individual basis.



STUDENT PERSONNEL PROGRAM

The central purpose of the Personnel Program is to promote the kind of environment in which college students may develop into mature, well-balanced citizens, self-disciplined and aware of the life-long process of education and individual fulfillment. The program fosters student initiative, student responsibility and the rights of students to plan and execute. It provides opportunities for student involvement, for creativity, for accomplishment, and fosters a climate conducive to intellectual stimulation and growth. The program also provides services for those students who meet difficulties they themselves cannot resolve. A Student Life Advisory Council composed of students, faculty and administrators coordinates the program.

ADVICEMENT

Freshmen

After admission and prior to entrance, freshmen come to the campus to consult with advisers concerning the selection of appropriate courses. They register and begin college orientation.

During the fall semester, senior students serve as personal and academic advisers to freshmen. Personal interviews, group meetings, and laboratory experiences are provided to promote self-orientation and to help freshmen explore interests and abilities of professional significance. This program of personal and professional orientation is organized and administered as a regular part of the college curriculum.

On the first Sunday of the fall semester, parents of all freshmen students are invited to spend an afternoon at the college. This occasion provides an opportunity for parents to tour the campus and to meet other parents, students, and some faculty members.

Upperclassmen

During the freshman year, each student selects a faculty member who will serve as his adviser for the remaining years the student is in college. Students should request an adviser in the area of their primary academic

interest. The adviser is an understanding adult, with whom the student may discuss his personal, professional, and educational problems. When such assistance seems desirable, students are encouraged to consult instructors, the deans, college counselors, the college physician, and the consulting psychiatrists.

COUNSELING CENTER

In recognition of the principle that educational experience encompasses all aspects of human behavior, the Counseling Center has been established to help students develop social and emotional maturity.

Services of trained counselors are available to students who feel themselves to be in need of assistance in making personal, educational or career decisions. In a confidential and accepting climate, the student is afforded the opportunity to gain deeper insight into his needs and goals.

In addition to individual counseling, the center offers a program of group counseling and limited testing facilities.

The center staff participates in student and faculty activities which are concerned with the mental health of the college community.

FINANCIAL AID

The Financial Aid program assists students who demonstrate a need for financial help in order to pursue a college education. The amount of financial assistance a student may receive depends upon his need-taking into account his financial resources, those of his parents, and the cost of attending Towson State College. A student seeking financial assistance may receive it in the form of a loan, a scholarship, a grant, on-campus employment, off-campus work-study employment or any combination of these aids depending on particular circumstances. The Financial Aid Committee is responsible for formulating policy in regard to financial assistance and the Director of Financial Aid is responsible for executing this policy.

Scholarships and Grants

Federal

Educational Opportunity Grants are available to a limited number of undergraduate students with exceptional financial need who require these grants to attend college. To be eligible, the student must also show academic or creative promise. Eligible students who are accepted for enrollment on a full-time basis or who are currently enrolled in good standing may receive Educational Opportunity Grants for each year of their higher education, although the maximum duration of a grant is four years. Grants will range from

\$200 to \$1,000 a year and can be no more than one-half of the total assistance given the student.

Students under the program offered through the Veterans Administration and/or students who are offspring of deceased parents covered by Social Security may receive assistance and must register in the Registrar's Office of the College.

College Scholarships

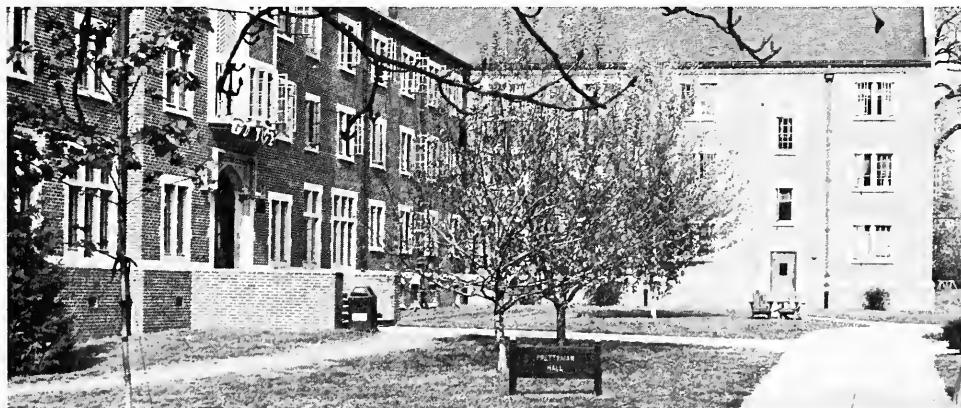
The Helen Aletta Linthicum Scholarships were established by the will of Helen Aletta Linthicum, widow of J. Charles Linthicum, who was a member of the class of 1886. The fund is administered by the trustees of the estate and the Financial Aid Committee. All entering and continuing students are eligible to qualify for these fifty-two awards.

Income from the Sarah E. Richmond Loan Fund is allocated to students in the teacher education program. Four scholarships are usually awarded annually.

The Edith C. Sheridan Scholarship, established by Mrs. Sheridan, a member of the class of 1906, is administered by the Financial Aid Committee.

One upper-class student may receive the Minnie V. Medwedeff Endowment Scholarship. This award is made annually to an outstanding student selected by the trustees of the fund. The scholarship was established in memory of Minnie V. Medwedeff by her father. Miss Medwedeff was an instructor in the college from 1924 until her death in 1935.

The Maryland Sports Boosters Scholarship is awarded each year to a student from the City of Baltimore who plans to major in physical education and agrees to teach in the city for two years following graduation. The stipend is \$300 per year for four years.





State Scholarships

Residents of the State of Maryland enrolled in the teacher education program may elect to sign a two year teaching pledge in lieu of paying tuition. Only students academically in good standing are eligible. By signing the pledge the student agrees to teach for two years in the State of Maryland upon graduation.

The State of Maryland each year awards General Scholarships and a number of Legislative or Senatorial Scholarships to legal residents of the State. The awards are given to college freshmen, sophomores and juniors. Interested high school students should consult their school counselors. Students presently enrolled at Towson State College apply to the Director of Financial Aid.

Students are entitled to financial assistance if they are under the Vocational Rehabilitation Program of the State, or if they qualify for the War Orphans Program offered by the State of Maryland. Eligible students should report the fact immediately to the Comptroller's Office of the College. Further information is available in the Office of the Director of Financial Aid.

Community Scholarships

Other scholarships, ranging from \$100 to \$300, are donated by various community and service clubs, parent-teacher associations, women's clubs, businesses, and individuals. Some of the donors ask the college to select the award winners and some select their own recipients.

Scholarship Donors: 1969-1970

American Totalisator Company
Women's Club of Bethesda
Black and Decker Manufacturing Company
Carroll Manor PTA
Daughters of the American Revolution
Dumbarton Junior High School
Alice Gibson Scholarship
Frieda Rosen Memorial Association
Opti-Mrs. of Hamilton, Inc.
Harford Hills Elementary School PTA
Highlandtown School PTA
Hillendale Women's Club
Hillendale Elementary PTA
Leith Walk Elementary PTA
Loch Raven Elementary PTA
Loch Raven Opti-Mrs.
Mary McGuigan Scholarship Fund
Women's Club of Mt. Washington
Pleasant Plains PTA
Rodgers Forge PTA
Women's Club of Rodgers Forge
Ruxton Elementary PTA
Christopher Harris Souris Memorial Fund
Towson Elementary PTA
Villa Cresta PTA
Wellwood Elementary PTA
Yorkewood Women's Club, Inc.

Loans

Federal

The National Defense Student Loan Program was established by the National Defense Education Act of 1958. Under the provisions of the Act, stu-

dents must meet four qualifications to be eligible for assistance: they must be in good academic standing and, in the opinion of the College, capable of maintaining a strong academic record; they must be citizens or permanent residents of the United States; they must be full-time undergraduate students; they must show financial need. A student may borrow up to \$1,000 a year. The Act provides that the repayment of the principal of the loan, together with accrued interest thereon, shall be made over a ten-year period beginning the last day of the ninth month when the borrower ceases to be a full-time student. The loan bears simple interest upon the unpaid balance at the rate of 3 per cent per year. The loan, and interest thereon, of any borrower who serves as a full-time teacher in the schools within the State shall be cancelled up to a maximum of 50 per cent at the rate of 10 per cent of the amount of the loan plus interest thereon for each academic year of service.

State

The Maryland Higher Education Loan Corporation offers students the opportunity to borrow money from participating banks. They may borrow as much as \$1,000 annually with a \$5,000 limit. Repayment of the principal plus seven per cent interest begins the first day of the tenth month after the recipient ceases to be a full time student. The recipient is charged no interest while a full time student.

College

College loans are made at a low rate or at no interest.

The Sarah E. Richmond Loan Fund was established by Sarah E. Richmond, who was affiliated with the College for 50 years as student, teacher, principal, and dean of women. This fund has been increased by gifts from the Alumni Association.

The College Loan Fund is available to all students who have completed one year of college at Towson with a commendable record and can establish financial need. The amount will vary according to need, the maximum being four hundred dollars for the year. The College Loan Fund was made by contributions from the following: the Class of 1900 Memorial to Katherine Muhlback, the Class of 1925, the Normal Literary Society, the Pestalozzi Society, the Reese Arnold Memorial, the Lillian Jackson Memorial, the Esther Sheel Memorial (Class of 1927), the Carpenter Memorial, the Eunice K. Crabtree Fund (gift of the Class of 1931), the Pauline Rutledge Fund (gift of the Class of 1934), the Pearle Blood Fund (gift of the Class of 1940), the 1933 Gift Loan Fund of Faculty and Students, the Gertrude Carley Memorial, Washington County Alumni, the Grace Boryer Downin Fund, the Class of 1941 Fund, the Martha Richmond Fund, the Tower Light Fund, the M. Clarice Berch Fund

(gift of the Class of 1951), the Bettie Sipple Fund sponsored by the Maryland Federation of Women's Clubs, the Lucy Scott Memorial Fund, the James B. O'Toole, Jr. Memorial Loan Fund, the Ellen Pratt Hamilton Memorial Loan Fund, the Rodgers Forge PTA Loan Fund in Memory of Ellen Pratt Hamilton, and the Mrs. Carrie Gischel Obrecht Beta Delta Loan Fund.

The Edward Moulton Fund, established in memory of a student of the Class of 1957, is a short-term fund limited to \$75.00 and open to all students, interest free.

There exists also a loan fund for music education majors administered by the music department and a Student Government Association Loan Fund administered by the Treasurer of the S.G.A.



Employment

Federal — Work Study Program

Students who need work to help pay for college expenses are potentially eligible for employment under federally supported Work-Study Programs. Students may work up to 15 hours weekly while attending classes full-time. During the summer or other periods when they do not have classes, students may work full-time (40 hours per week) under this program. Jobs may include work on and off campus. To work under this program, a student must be enrolled and be in good standing, or be accepted for enrollment as a full-time student. The student's eligibility depends upon his need for employment to defray college expenses, with preference given to applicants from low-income families.

Other Work Opportunities

On Campus

Additional employment is available to students under a College supported program. These jobs may be in the various areas throughout the college. Clearance from the Director of Financial Aid is required. All students on the College payroll must be in good standing.

Students who wish to tutor should apply in the Office of the Director of Financial Aid, Stephens Hall 103.

Off Campus

The Director of Financial Aid posts notices from outside organizations of off-campus employment opportunities during the academic year and summer. These jobs include work for a variety of community agencies and stores and summer camp experiences.

Procedure for Applying for Financial Aid

Students in need of financial aid presently enrolled at Towson State College should:

1. Consult with the guidance counselor or personnel officer in the institution which the student currently attends.
2. Write to the Director of Financial Aid at Towson State College for information and an application if the student wishes to apply for financial aid under College auspices.
3. File the application with the Director of Financial Aid by November 15 or April 1 for the semester following.
4. Receive notice of Committee action by January 15 or June 1.



Deadlines for Applications

The deadlines for applying for financial aid by presently enrolled students and entering students are:

- a. N.D.E.A., E.O.G.: April 1 and November 15 for the semester following.
- b. Scholarships: April 1 and November 15 for the semester following.
- c. Part-time employment: no deadline, but applications should be filed with the Director of Financial Aid by June 1 for the following academic year.
- d. Other loans: no deadline.

HEALTH SERVICES

Health Services are maintained in a modern two-story building located on campus. For specific information, the student is referred to the Health Center Booklet which is distributed to all new students.

For more serious illnesses, the student will be referred to his or her home or hospital for definitive treatment. With the student's knowledge, the staff works closely with the parents and/or family physician in all important illnesses or accidents.

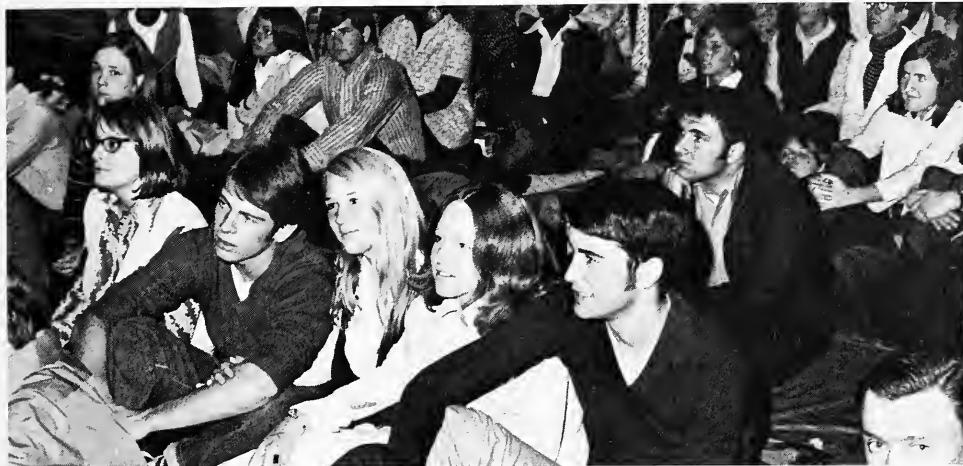
The professional staff consists of college physicians, college psychiatrists, registered and practical nurses. Physician Services are available daily during office hours, and in emergency situations at any time.

A completed medical record is required of all students prior to the time of their admission. Exception may be made for those applicants whose religious principles preclude compliance and whose affiliation with an organization is official. Additional examinations are given when conditions warrant. A student is expected to correct remediable defects as soon as possible, preferably before the opening of the college year.

Annual chest X-rays or other proof of freedom from tuberculosis (i.e. a negative tuberculin test) are compulsory for all students. Health education and prevention of illness and accident are essential parts of the college health program.

The College assumes no financial responsibility for illness of sufficient seriousness to require hospitalization, X-rays, or special treatment. The College does not assume financial responsibility for any injury incurred upon the athletic field or in any physical education class.

A student who has a physical condition which prevents complete participation in the regular physical education program may be permitted upon authorization of the College Physician and the Academic Standards Committee to take a modified program or to be exempt from physical education requirements.



Accident Insurance

For the benefit of those students who wish to participate, the College enters into an agreement with an approved insurance company to cover students against any accidental injury either at College or at home during the academic year. Participation in the plan is voluntary and costs approximately \$5.00 for women and \$7.50 for men per year. Students desiring this coverage should make application at the Comptroller's Office.

Students planning to major in physical education or participate in intramural activities are required to enroll in the insurance program.

Mental Health

The Student Health Service includes consulting psychiatric services.

The students may arrange consultations with the psychiatrist on a self-referral basis. All such consultations are completely confidential.

Students may choose to see the psychiatrist once, or a number of times, for brief psychotherapy. Long term psychotherapy is available, when indicated, at a psychiatric center adjacent to Towson State College's campus.

The psychiatric services are also involved in various faculty and student groups whose areas of concern impinge upon the mental health of the college community.

ORIENTATION

All new students are expected to participate in Orientation Week, at which time senior students serve as instructors in a specialized program. New

students meet with College personnel and student leaders in informal discussions where information and ideas concerning College resources available to the student are presented and the student's role in the College community is discussed.

In addition to the activities planned for the opening of the academic year, all new students attend a series of small group meetings (eight weeks for freshmen, four weeks for transfer students) designed to acquaint them with the objectives of the College, to familiarize them with expectations it has of its students, and to assist them in adjusting to their new responsibilities.

The major aim of the Orientation Program is to help the individual continue to realize his greatest potential through the utilization of the resources within the College community.

RESIDENCE PROGRAM

The purpose of the Residence Program is to provide living facilities for single, full-time undergraduate students. The residence staff and the elected executive councils of the Resident Student Government Association strive to maintain an environment conducive to the individual's achievement of academic goals and development of self-reliance and leadership. The elected Men's and Women's Judicial Boards handle cases in violation of residence policies. Upon the recommendation of a Judicial Board and its acceptance by College authorities, a student may be required to leave residence.

Single students under twenty-one years of age, who live in off-campus housing other than their legal residence, must live in College-approved homes. Meal tickets are compulsory for those students living on campus and optional for those students living in approved off-campus housing. The rules and regulations stated in the publication, *Handbook for Residence Living*, apply to all students in College-approved housing.

Priority for campus residence is given to students who reside beyond a twenty mile radius of any four-year state institution. An interview with a member of the residence staff is necessary before applicants can be assigned.

All resident students must sign a yearly contract for College approved housing. Acceptance to residence is on a yearly basis, and not for the duration of a student's college career. A student who withdraws from residence forfeits his reserve space, but may reapply should he wish to return.

Residence facilities are available to students only when classes are in session. No student is permitted to remain in residence more than forty-eight hours after he has ceased attending classes.

Additional information may be found in the brochure, *Housing at Towson State College*, and the publication, *Handbook for Residence Living*.

CAREER PLANNING AND PLACEMENT

The Placement Office is a centralized service for all departments of the college. The purpose of the Placement Office is to assist all students and alumni of Towson State College in securing employment and to aid those students continuing to other institutions at the graduate level.

The Placement Office furnishes occupational and vocational information and provides career counseling for all interested students, arranges for an



on-campus recruiting program to bring employers to the campus to meet the students, informs students of job opportunities, and keeps on file credentials for all students utilizing the services of the Placement Office.

Graduate Fellowships and Assistantships

Every effort is made to inform interested students of graduate fellowships and assistantships and to assist students in making application for such grants. Literature for grants is available in the Placement Office.

COLLEGE CENTRE

Program

The College Centre, its program and facilities, operates under the authority of the College Centre Board. The Board is composed of students, faculty, and administrators. The complexity of society, campus bureaucracies, advances in communication, increasing enrollments, professional pressures on faculty, and changes within individuals are producing impersonal communities of intellectuals. The College Centre facilities are designed to overcome the impersonalization of the large college, serving both as an educational center for out-of-class activities and also as a service center. The College Centre as a program is organic, vital, changing, and alive. The Centre houses educational and cultural programs of value for the entire academic community, which complement programs offered in the classroom. The Centre is also the place where resident and commuting students can establish their social activities, relax, and make the out-of-class time in their lives meaningful. The College Centre displays, through its facilities and programs, to its various publics the character of the institution it serves.

Although many may come to the Centre for food, it differs from other campus buildings in the following respects: Individuals for the most part must choose to come to the Centre. The activities housed in the building are extra-curricular and voluntary. The students participating in special interest or governmental groups have an opportunity to experiment, assume responsibility, interact with the faculty and administration and by so doing come to know more about themselves and the College.

SERVICES

Snack Bar

The Snack Bar is located in the College Centre. It is designed to provide snacks of all kinds for students with quality food at reasonable prices. The Snack Bar also includes a variety of vending machines which enable the students to obtain lunch or dinner quickly and at a low cost.

College Box Office

The College Box Office Manager provides students, faculty, and administrators with a discounted ticket service to the local theaters. The manager will arrange for the purchase of any tickets for recognized groups on campus. The Manager also handles the student sponsored activity tickets and arranges for off-campus travel of student groups.

Post Office

The Post Office is located in the College Centre of Newell Hall. All students are assigned a mailbox and combination to that box.

College Book Store

The College Book Store is located on the lower level of Linthicum Hall and carries a complete line of books, trade fiction, non-fiction paperbacks, reference, technical, and course outlines and aids.

Also for sale are general school supplies, typewriters, leather goods, college clothing, gifts, records, and toiletries. The College Store also carries a complete line of art supplies and a wide selection of arts prints. Framing materials are also available.

New College Centre

The new College Centre is under construction, and should open in the Spring of 1971. Included in the three-story brick structure will be a music room and browsing library, a gallery-lounge, bowling lanes and billiard tables, a bookshop, branch bank, post office, and a variety of dining facilities. A sculpture garden and covered decks and fountains complete the union plans.

To facilitate maintenance and programming, the building will provide central vacuum cleaning, wall-to-wall carpeting, and closed circuit television.

Financing will be by revenue bonds. An annual student fee, presently scaled at \$65 annually for full-time students, will provide the necessary funds for meeting the bond issue.

STUDENT GOVERNMENT ASSOCIATION

The Student Government Association is the governmental body of the student body. It is an integral part of the college community and is recognized as a contributing organization in the overall government of the College.

Upon enrollment at Towson, each student automatically becomes a member of the SGA. The organization consists of an executive committee, composed of the President, Vice President and Treasurer of the SGA and various appointed officers, and a Student Senate composed of eight senators elected from each class.

The broad objectives of the SGA are outlined in the Preamble of the Student Government Association Constitution:

1. To improve student awareness and welfare.
2. To foster the recognition of the rights and responsibilities of students.
3. To responsibly fulfill those privileges of self-government.

The activities of the Student Government Association primarily concern the educational experience of the student, as a member of the College community, both in and out of the classroom. These activities are justified in a collegiate setting by the extent to which they contribute to the educational experience of each student. All students are invited to aid the SGA in their expressed goals and objectives.

STUDENT ORGANIZATIONS

Groups of students may feel free to meet in campus facilities. In order to be recognized as a College organization, however, constitution must be approved by the SGA. Financial subsidy from the SGA is given only when a faculty advisor has been assigned by the office of the Dean of Students.

Recognized student groups include music organizations, honor societies, organizations related to an academic field, political organizations, religious organizations, service organizations, and special interest organizations.

Student publications are: Talisman, a literary magazine; Tower Light, the weekly official student newspaper; Tower Echoes, the yearbook; The Gold and White, the official student handbook; and the International Affairs Journal.

Athletic Activities

Towson State College is committed to comprehensive intercollegiate and intramural athletic programs for men as integral parts of the student's total educational experience. An opportunity is provided for all students who desire to participate. The College is a member of the National Collegiate Athletic Association and the Mason-Dixon Conference. The varsity schedules include many of the finest universities and colleges in the East. Competition on the varsity level includes football, soccer, cross country, basketball, wrestling, swimming, gymnastics, baseball, lacrosse, tennis, track and golf. Facilities and leadership are provided for intramural sports during all seasons. Students are encouraged to participate according to their interest.

The Women's Physical Education Department and the Women's Athletic Association promote an active sports program for all women enrolled at Towson State College. The intramural and varsity program is organized to include a variety of activities: archery, badminton, basketball, bowling, dance, fencing, field hockey, golf, gymnastics, lacrosse, softball, swimming, tennis and volleyball. Special events conducted by the Women's Athletic Association each year include: dance recitals, ski trips, camping outings, and the annual banquet.





ACADEMIC REGULATIONS

REGISTRATION

Each student is assigned a time to register. Students are not permitted to attend classes without having completed registration. A late registration fee is assessed for registering after the time assigned and within the late registration period. Students are expected to discharge all financial obligations to the institution before being permitted to register.

TRANSFER CREDIT

Credit is accepted for a course completed at any accredited college or university if it is equivalent to a course taught at Towson State College or acceptable as an elective and if the final mark is "C" or higher. This credit will count toward graduation but will not be used in computing the academic average required for graduation.*

CREDIT HOURS

The unit of credit is the semester hour. It is defined as one 50-minute class per week (or its equivalent) for one semester. A three-hour class meets three 50-minute periods or two 75-minute periods a week for one semester. Laboratory and studio classes normally require two or three hours in class as the equivalent of one semester hour. Two hours of preparation is usually necessary for each hour in class for the average student.

PROGRAM TRANSFER

Students in good standing in either the teacher education or the arts and sciences program may transfer to the other program by filing a request form with the Registrar, as Secretary to the Academic Standards Committee. Upon approval of the Academic Standards Committee, the transfer will be effective for the semester following the one in which the request is made.

Those wishing to transfer to the arts and sciences program will be obligated in the amount of \$100 for each semester of work completed in the teacher education program if the teaching pledge was signed in lieu of tuition payment.

*Transfer students may obtain specific information from Director of Admission. Towson State College students must obtain prior approval from Academic Standards Committee.

EXEMPTION FROM REQUIRED COURSES

Believing that students should not be required to devote time to courses the substances of which they have mastered, the College provides opportunity to qualify for exemption from required courses. Towson students may apply through the Dean of the College to be examined for exemption, from courses required of all students and those required in a major field. The department concerned and the Director of Research and Testing cooperate in the evaluation. When exempted, the student is privileged to choose an elective in any department or an advanced course in the same department. Required courses in the following fields are at present involved in this plan: biology, English, geography, mathematics, music, speech, history, political science, and sociology.

STUDENT LOAD

The normal student load is 15-18 semester hours of credit each semester.

Students may take up to 19 semester hours for credit. It is suggested that students possess a minimum cumulative average of 2.00 to take 18 semester hours and a cumulative average of 2.50 to take 19 semester hours.

Students with a 3.25 cumulative average based on at least 30 hours taken at Towson State College may carry 20 hours. In his last semester of his senior year a student may carry 20 semester hours provided the number is necessary to be graduated and provided his cumulative average is 2.50 or better.

Students with a 3.50 cumulative average or better, based on at least 30 hours taken at Towson State College may carry 21 hours.

No student will be permitted to carry more than 21 hours or less than 12 hours except by special permission of the Academic Standards Committee.

Students must have the approval of the Registrar to register for more than 19 semester hours during any one semester.

AUDITING COURSES

A student may audit a course with the permission of the instructor of the course. No credit may be earned in a course which is audited. Audited courses will not appear on the student's record. Students who wish to take the course for credit may do so only during the Change of Schedule Period as an added course.

CHANGE OF COURSE SCHEDULE

All changes in a student's schedule of courses (adding or dropping a course or a change in sections or credits) are valid only if the student completes the Course Schedule Change Form and files it with the Registrar. Failure to do so will result in a grade of "NC" in the course dropped and no credit in the course added. The grade will appear on the Grade Roster of the course and on the student's Grade Report.

No student may enter a class after the first week of classes. Exceptions to this will be considered only after approval of the department chairman of the course involved and the Dean of the College.

Entering freshmen wishing to obtain waiver of courses for the honors plan may arrange to take Advanced Placement Tests of the College Entrance Examination Board in fields in which they feel qualified. Arrangements to take these examinations in May of the high school senior year may be made through the school counselor or through the College Entrance Examination Board P. O. Box 592, Princeton, New Jersey.

WITHDRAWAL FROM A COURSE

Students dropping courses prior to examination week through the Registrar's Office will receive a grade of "X" which removes all record of the courses.

CLASSIFICATION OF STUDENTS

Students are classified according to the number of semester hours passed as follows: freshmen, 0-30 semester hours; sophomores, 30-60 semester hours; juniors, 60-90 semester hours; seniors, 90 semester hours or above.

MARKING AND POINT SYSTEM

A four-point system is used to indicate quality of academic work. The letter "A" designates work of superior quality; "B", work of good quality; "C", work of satisfactory quality; "D", work of less than satisfactory quality but allowance for credit, subject to the restrictions specified under the Degree Requirements; "NC", work of such unsatisfactory quality that no credit is given. The mark of "S" (Satisfactory) or "NC" is given for non-credit courses or student teaching. The mark of "PA" (Pass) or "NC" (No Credit) is given for the courses elected on the Pass Option.

A mark of "I", (incomplete because of illness or other reason beyond control of student) at the end of a semester carries no credit. Unless such a course is satisfactorily completed by the end of the next regular semester the grade for the course becomes "NC". It is the responsibility of the student to make arrangements to complete course requirements for the removal of the "I".

In computation of grade point averages the following quality point values are used:

A - 4	quality points
B - 3	quality points
C - 2	quality points
D - 1	quality points

Grades of "I", "NC", "PA", and "S" are not used in computation of averages.

The grade-point average is computed by multiplying the hours of credit in a course by the points assigned to the grade earned in the course. Totaling the credit hour points for all courses passed in the semester, and dividing the total number of points by the total number of hours of credit passed yields the grade-point average for the semester. For example:

4 hours of A	(4 points each).....	16 points
4 hours of B	(3 points each).....	12 points
3 hours of C	(2 points each).....	6 points
3 hours of D	(1 point each).....	3 points
2 hours of NC	(No Credit Given).....	
14 Total hours passed		37 Total points

Dividing 37 by 14, the student's grade-point average for this semester is found to be 2.64.

The student's cumulative grade-point average is found by dividing the total points earned in all courses completed at Towson by the total number of credit hours passed at Towson. For example: a junior has passed 76 credit hours and has earned a total of 190 points. His cumulative grade-point average is 2.50.

A cumulative grade-point of at least 2.00 is required for graduation.

STANDARDS OF WORK REQUIRED

Philosophical Premises

Academic Standards are set to insure that a degree from Towson signifies student work meeting or exceeding a particular level of excellence.

The intent is to reinforce appropriate learning behavior, and to help the student work independently and develop intellectually in a variety of ways.

Repeating of Courses

Students may repeat any course once where credit has been earned. When a course is repeated, the student will receive the credits for the course counted once and the higher of the two grades if repeated for the first time after 1 September 1970. Students repeating courses must indicate this at the time of registration.

Standards for Full-Time Students

In order to remain in the college, full-time students must make the following progress in their work.

TABLE I
REQUIRED MINIMUM CREDITS THAT MUST BE PASSED
IN RELATION TO SEMESTERS OF STUDY

Semesters of Study	Required Minimum Credits Passed
Two	16
Four	36
Six	64
Eight	96

In addition, in order to remain in the college, the student must have a cumulative grade point average above the guidelines below:

TABLE II

MINIMUM GRADE POINT AVERAGE TO BE IN COLLEGE

Credits Passed	Minimum GPA To Be In College	Minimum Level of Satisfactory Progress
1-32	1.00	1.85
33-42	1.00	1.95
43	1.01	1.95
44	1.08	1.95
45	1.14	1.95
46	1.21	1.95
47	1.27	1.95
48	1.32	1.95
49	1.38	1.95
50	1.43	1.95
51	1.48	1.95
52	1.53	1.95
53	1.58	1.95
54	1.62	1.95
55	1.66	1.95
56	1.71	1.95
57	1.75	1.95
58	1.79	1.95
59	1.82	1.95
60	1.86	1.96
61	1.90	1.97
62	1.93	1.98
63	1.95	1.99
64-128	2.00	2.00



TRANSFER STUDENTS

The expected minimum number of credits passed for transfer students will be determined by dividing the number of credits transferred in by 12, rounding the answer to the nearest lower whole number, and relating it to Table III. (Required Minimum Credits Passed for Transfer Students) For instance, a student transferring 64 hours would start at the 5 Semesters of Study point on the scale (64 divided by 12 = 5.33). To meet the minimum credits passed after two semesters of study, he would be expected to have passed 80 credits at the end of seven semesters of study.

TABLE III	
REQUIRED MINIMUM CREDITS PASSED FOR TRANSFER STUDENTS	
Semesters of Study	Required Minimum Credits Passed
1	8
2	16
3	24
4	36
5	48
6	64
7	80
8	96

In addition, transfer students bringing in more than 60 semester hours of study, must earn no less than a 1.5 grade point average at the end of the first semester and a 2.00 at the end of the second semester if they are to remain at Towson. After this, they are expected to meet the same grade point average standards as other full-time students as determined in Table II.

Those transferring in with 59 hours or less are required to have a grade point average determined in the following way: Relate the "Required Minimum Credits Passed" in Table II to the "Minimum GPA To Be In College" column in Table II. (For instance, a student who is required to have earned 48 credits at the end of two semesters at Towson would be required to have earned a 1.32 or better at that time to remain at Towson).

PASS OPTION

Students will be able to elect on a voluntary basis 12 credits toward their degree for which they may be graded on a pass/no credit basis. No more than six hours per semester can be taken on a pass/no credit basis. This option is not available for courses required for the major and for certification in Teacher Education unless special permission is sought from the department. The option must be elected at the time of registration. The Registrar will make this information available to the instructor upon request.

PROCEDURES FOR REINSTATEMENT

Those no longer in good standing may appeal for reinstatement. In most cases students who are dismissed for academic purposes will be expected to

remain out of the day school for two semesters. Those students who bring their cumulative average up to the credits completed and GPA Norm by taking courses in the Evening, Summer Program and January Session are eligible for reinstatement; however, a student must take courses in which letter grades are given in order to have this work apply before the completion of the one year period. Up to 18 credits can be taken in the Evening and Summer Program for this purpose.

In evaluating requests for reinstatement, the Academic Standards Committee, without changing previous policies, will weigh heavily an indication of improved performance.

The personal development of each student is considered. The College may exercise its right to ask a student to withdraw at any time.

DEGREE REQUIREMENTS

Bachelor of Arts Degree

Those wishing to qualify for a Bachelor of Arts degree may do so by fulfilling the requirements for the Bachelor of Science degree and by completing the intermediate course or the equivalent of a modern foreign language.

Bachelor of Science Degree

A student who satisfactorily meets the following requirements will receive the Bachelor of Science degree.

1. College credit of one hundred twenty-eight semester hours.
2. Credit in the courses required of all students.
3. Credit in the required courses of the curriculum he has elected.
4. Successfully complete a major except for those in Early Childhood or Elementary Education.

With prior approval of the Standards Committee, a student may substitute an interdisciplinary program designed to meet his particular objectives.

A mark of "C" or higher is required in all courses taken in the department and applied toward the major or minor of that department. If this standard is not attained, the student must repeat the course or substitute another course in the field at the direction of the department.

5. A cumulative average of at least 2.00.
- *6. Fulfillment of the speech requirement.
7. Record of attendance at the College for at least one academic year during which thirty semester hours of credit were earned. A student is expected to earn his final thirty credits at the College unless he receives special permission to the contrary.

* Not required.

8. Demonstration of personal qualities which are expected of an educated person.
9. A record of having taken the required freshman and senior examinations or their approved equivalents.
10. File with the Registrar a Graduation Application according to the following schedule:

February Graduates: file by February 28th of the year prior to the year of graduation.

June Graduates: file by September 30th of the year of graduation.

August Graduates: file by July 1st of the year of graduation.

GENERAL COURSE REQUIREMENTS OF ALL STUDENTS

The new general course requirements went into effect in September 1969, and affect all incoming freshmen and transfer students. However, Towson State College returning students have the option to remain on the plans under which they were admitted or elect to follow the new plan as follows.

All students are reminded that the adoption of a new set of General Education Requirements does not change their departmental requirements, or the requirements for State certification of teacher education students. Students should consult their advisors if they have any questions regarding their degree programs.

<i>Group</i>	<i>Number of One-Semester Courses</i>
<i>Group I</i>	
Disciplines of Art, Drama, English, Music, Philosophy and Religion, Speech (at least two, but no more than three courses must be in the English Department; and no more than one course can be taken in any one of the other disciplines)	6
<i>Group II</i>	
Disciplines of Biological Sciences, Mathematics, Physical Sciences, Psychology (no more than one course can be taken in any one discipline)	3
<i>Group III</i>	
Disciplines of Economics, Geography, History, Political Science, Sociology, (courses must be taken in at least three of these disciplines)	4

Group IV

Disciplines of Physical Education, Health (at least one course must be in Physical Education area) 2

The requirements for a Bachelor of Arts degree are the same as those listed above for the Bachelor of Science degree plus 12 hours or the equivalent in one foreign language.

SENIOR EXAMINATIONS

Seniors are required to participate in the Senior Testing Program. Testing is scheduled once each year during the spring semester. Students eligible for testing are those who expect to complete graduation requirements in spring or summer of the test year or by the end of the first semester of the following academic year.

ATTENDANCE

Students are expected to attend all classes. Each faculty member sets his own policy on absences. Policies vary and it is the responsibility of the student to understand clearly the absence policy of each instructor and to act accordingly. Students are expected to notify the Dean of Students by phone or in writing of any absence exceeding three days.

LENGTH OF ATTENDANCE

Only in unusual cases may a student remain in the College for longer than eight semesters. Any requests for deviation from this plan must be submitted to the secretary of the Committee on Academic Standards.

WITHDRAWALS

A student wishing to withdraw from the College is to obtain a withdrawal card from the Office of the Dean of Students. Before the withdrawal is official, the student must submit the completed withdrawal card to the Office of the Registrar. The student will be marked according to grading policies if the withdrawal occurs during a semester.

TRANSCRIPTS OF ACADEMIC RECORD

The student is entitled to one transcript without charge. One dollar will be charged for each subsequent transcript. Transcripts will be sent only upon written request of the student. Transcript request forms may be obtained at the Office of the Registrar. The College requires at least two weeks notice for issuance of a transcript record.

A student with an outstanding indebtedness to the institution will not be eligible for transcripts of record.

HONORS PROGRAMS

Under the direction of a College Honors Programs Board, a number of departments of the College offer Honors Programs in their disciplines or cooperatively offer interdisciplinary Honors Programs. The student who completes an approved program will receive a diploma with the designation Bachelor of Arts or Bachelor of Science with honors in the appropriate discipline.

The program is developed for the junior and senior years and includes 9 to 12 semester hours credit in seminars, directed readings, and research projects. A senior thesis is required as well as an oral defense of the thesis. A candidate will also be expected to make a respectable showing on the Graduate Record Examination.

To be admitted to the program a student must present a cumulative average of 3.0 and a 3.25 cumulative average in his discipline. To graduate from the program the recipient of an Honors degree must present a 3.0 cumulative average and a 3.5 cumulative average in his discipline.

Details of the departmental plans may be obtained from the office of the department chairman.

Graduation with Honors

To receive a bachelor's degree with honors, a student must have completed work taken at Towson State College with the following cumulative grade point average:

3.75 to 4.00	Summa Cum Laude
3.50 to 3.74	Magna Cum Laude
3.25 to 3.49	Cum Laude

Transfer students must have, in addition, a 3.25 or better average at institutions previously attended and a minimum of 60 semester hours of work at Towson State College.

Transfer students eligible for Summa Cum Laude awards based on work completed at Towson State College must be approved by the Academic Standards Committee.

To receive a bachelor's degree with honors in a discipline, a student must have completed a departmental honors program and be recommended for honors by that department.

THE COLLEGE CURRICULUM

The College offers undergraduate programs in the arts and sciences, teacher education, business administration, medical technology, and international studies.

THE ARTS AND SCIENCES PROGRAM

The arts and sciences program at Towson offers opportunities of higher education to those who are interested in obtaining a broad, liberal education. Students in the arts and sciences program may pursue courses leading to further preparation for a variety of careers. In some professions, such as law and medicine, it is usually advisable to complete a four-year liberal arts course before beginning professional study. In others, students should plan to transfer to a professional school after one or two years, unless the professional school's admission plan permits a longer period of pre-professional study.

Those who decide it is appropriate to enter professional study should study carefully the catalogue of the institution which they wish to attend in order that they may select the Towson courses required for admission to the professional program. The following program of study is suggested for the freshman year:

			Hours
Orie	56.080, 090	Orientation	0
Art	12.203	Art in the Culture	2
Engl	30.102	Freshman English Composition	3
Musc	54.101	Introduction to Music Literature	2
Phed	*101-159	Physical Education	2
Biol	14.101	Fundamentals of Biology	4
Hist	40.121-122	History of Western Civilization	6
Hist	40.145-146	or History of the United States	6
Spch	84.101	Fundamentals of Public Speaking	2

*Prefix coed 60, men 61, women 62.

A foreign language should be elected by those wishing to earn a Bachelor of Arts rather than a Bachelor of Science degree.

The following paragraphs outline how the liberal arts curriculum can provide basic preparation for several professions or vocational fields. Students

may obtain further information from their advisers and from the chairman of the department in which the major or most of the preparatory study is to be taken.

Students who look forward to graduate work should make early selection of the school they hope to enter in order that they may meet the entrance requirements of the chosen institution. Current catalogues of graduate and professional schools are on file in the Admissions Office. The Dean of Students has additional data on opportunities for advanced study, including available fellowships and scholarships.

Business

A four-year course in business administration is offered to the individual who is interested in a business career or who wants a business background for admission to a graduate or professional school.

College Teaching

The future college professor should build a strong undergraduate major in his chosen field and prepare for graduate study leading eventually to the Doctor of Philosophy degree. Inquiry should be made at several graduate schools with a view to meeting their entrance requirements. Preparation for reading proficiency in French or German should be begun as soon as possible in the undergraduate program.

Foreign Service

A student considering a career in the Foreign Service of the Department of State, or other overseas programs should plan a curriculum emphasizing a good general education, with particular attention to the use of the English language with skill and fluency, to a foundation in economics, geography, government and modern history, and to reading with comprehension and conversing with intelligibility in at least one modern foreign language of general utility. The Department of State now requires of all candidates both a written and oral examination in French, German, or Spanish. Mastery of additional foreign languages enhances a candidate's value to the Service.

Forestry

Broadly educated men, interested in outdoor life and possessing a strong background in the biological sciences, particularly botany, are desired by the university schools of forestry. One year of pre-forestry study, planned with the aid of a biologist and in accordance with requirements of the forestry school to which application is being made, may be taken at Towson.

Journalism

A desirable undergraduate preparation for a journalistic career consists of a broad program of arts and sciences with a major in English, history, or social sciences. Courses should be elected in several departments to supplement those required of all students. Specific acquaintance with newspaper writing and editing should be gained through the basic course in news writing and from service on the staffs of the College publications. Students are advised to apply for admission to the Speech Department's Mass Communications Major Program.

Law

Students planning to apply for admission to a college of law should make an excellent academic record in a wide variety of liberal arts work. Their objectives should be ability in thinking, writing, speaking, understanding of people, and broad knowledge of United States political and economic life, Anglo-American constitutional history, and of literature, sociology, and philosophy. Admission to a law school is sometimes granted superior students after two or three years of undergraduate work, but a college degree is usually required for admission.

Library Work

Prospective librarians should plan for a four-year program of arts and sciences followed by a one-year graduate course in a school accredited by the American Library Association. A good undergraduate record and a reading knowledge of at least one foreign language are customary requirements for admission to a degree program in library science. Prospective librarians may prepare for positions in which they would work primarily in the subject matter area of their special interest. At present there are more positions for school and college librarians than qualified candidates.

Medicine and Dentistry

A student expecting to graduate from Towson State College before entering professional school can meet the general admission requirements of a number of medical and dental schools by completing a major in biology plus two years of chemistry, and two years of English, mathematics, physics, and French or German. Electives may be chosen in health education, social sciences, English, and fine arts. The student who expects to transfer to a medical or dental professional school after three years at Towson is advised to consult the catalogue of the school to which he expects to apply to make sure that he meets the entrance requirements of that school. The following

pre-professional course pattern is suggested for consideration along with the requirements of the professional school to be attended:

First Year			Second Year		
		Hours			Hours
Orie 56.080.090	Orientation	0	Engl 30.204-205	Literature	6
Engl 30.102	Freshman Composition ..	3		Modern Language	6
Biol 14.101	Fundamentals of Biology	4	Phys 66.211-212	General Physics	8
Biol 14.109	Functional Anatomy of		Chem 22.231-232	Organic Chemistry	8
Chem 22.101-102	Vertebrate	4		*Electives	2 to 6
	General Chemistry	8			
	Modern Language	6		Total	32 to 34
	*Electives	<u>2 to 6</u>			
	Total	32 to 31			

Prospective medical and dental students should also consult with a biology faculty member as early as possible upon admission to Towson to plan a course program to meet the admission requirements of the professional school chosen by the student.

Ministry

In addition to complete devotion to his vocation, the prospective minister, priest, or rabbi should possess or acquire academic ability, sympathy for and skill in working with people, facility in writing and speaking, and broad knowledge in several fields. As a college student he should be active in his church or synagogue and in a campus religious organization. A four-year course in arts and sciences is required for admission by most theological schools. Most of the eight or more years of study for the Roman Catholic priesthood takes place in a seminary. More information may be sought from the student's minister, priest, or rabbi.

Nursing and Medical Technology

A liberal arts program is recommended as preparation for professional study in these two fields, particularly if the individual is interested in the additional vocational opportunities available to those earning a B.A. or B.S. degree. A major in biology is suggested for those planning to earn a college degree.

For those taking pre-professional work prior to studying medical technology, a three-year course leading to a biology major is the recommended minimum. This is followed by twelve months of clinical training in a hospital.

A student interested in Medical Technology should consult with Mr. Mauritz Anderson, Biology Department, as early as possible upon admission to Towson to plan the course program required. For description of the program, see Biology Dept.

* Electives chosen from such courses as College Algebra; History of Western Civilization; Introduction to Sociology; Government of the U.S.; Health Educ.; Public Speaking; Modern Lang.; Art in the Culture; Music Appreciation; General Psych.

The purposes of the Department of Nursing are to provide a sound baccalaureate program in professional nursing, to prepare graduates who can qualify for licensure as registered nurses, to prepare graduates who can function in staff positions in hospitals and community agencies, to prepare graduates capable of seeking advanced degrees and study in numerous areas of specialty, and to prepare graduates to enter teaching, supervisory and administrative positions in nursing.

The curriculum is in the process of being developed. The program will consist of a sound background of courses selected from the college general education requirements. The major will consist of foundation and theory courses taught at the college as well as class and clinical experiences in various area hospitals.

The following pre-professional course pattern is suggested for consideration along with the requirements of the professional school to be attended:

First Year			Second Year				
		Hours			Hours		
Orie	56.080,090	Orientation	0	Engl	30.204-205	Literature	6
Engl	30.102	Freshman Composition .	3	Phed	*201-202	Physical Education	2
Phed	*101-159	Physical Education	2	Chem	22.101-102	General Chemistry	8
Biol	14.101	Fundamentals of Biology	4	Hist	40.121-122	Western Civilization	
Biol	14.109	Functional Anatomy of Vertebrates or Microbiology	4	or	40.145-146	U. S. History	6
Soci	80.101	Introduction to Sociology	3	Spch	84.303	Advanced Public Speaking	3
		Public Speaking	2			**Electives	7 to 9
		**Electives	11 to 13			Total	32 to 34
		Total	29 to 31				

Personnel Work

Personnel work in educational institutions and psychological testing positions may sometimes be entered directly from college, but a graduate degree is usually required. Personnel work is a field in which work experience is important, particularly in industry and business, and one in which there is keen competition for starting positions. In addition to the general college requirements, the following suggestions are made: a major or minor in psychology, courses from the following areas: sociology, economics, and political science.

Pharmacy

Although a four-year college course is desirable as background for admission to a pharmacy school, two years of college is usually sufficient. Basic

*Prefix coed 60, men 61, women 62.

**Electives chosen from such courses as College Algebra; History of Western Civilization; Introduction to Sociology; Government of the U.S.; Health Educ.; Public Speaking; Modern Lang.; Art in the Culture; Music Appreciation; General Psych.

requirement of a typical pharmacy school would be met by a Towson student completing two years of work as outlined in the pattern that follows:

		<i>First Year</i>	<i>Hours</i>		<i>Second Year</i>	<i>Hours</i>	
Orie	56.080,090	Orientation	0	Engl	30.204-205	Literature	6
Biol	30.102	Freshman Composition .	3	Phys	66.211-212	General Physics	8
Math	50.115	Math I	3	Chem	22.211	Analytical Chemistry ..	4
Phed	*101-159	Physical Education	2	Econ	24.202	Economic Principles & Problems	3
Biol	14.101	Fundamentals of Biology	4	Hist	40.145-146	History of the United States	6
Biol	14.105	General Botany	4			American National Government	3
Engl	14.101-102	General Chemistry	8	PoSc	68.206	**Electives	2 to 6
		**Electives	0 to 3			Total	33 to 36
		Total	24 to 27				

A student interested in pharmacy should also consult with a biology faculty member as early as possible upon admission to Towson to plan a course program to meet the admission requirements of the pharmacy school chosen by the student.

Physical Therapy

The minimum requirements for admission into an approved school of physical therapy is sixty credit hours of college work, including eight credit hours in biology or zoology, six credit hours in physics and/or chemistry, and six hours in psychology. A list of approved schools and their admission requirements may be obtained from The American Physical Therapy Association, 1790 Broadway, New York 19, New York.

Public Administration

A student expecting to enter some field of public service (such as federal, state or local governmental organizations as administrators) should choose a major in the social science area suited to his objectives. Courses in political science, economics, sociology, psychology and business administration are recommended.

Social Work

Although social welfare agencies employ many individuals who have a four-year college education, leaders in the field consider two years of graduate education desirable. Undergraduate courses suggested include economics, political science, history, psychology, sociology, statistics, biological sciences, literature, public speaking, and news writing. Volunteer service with youth

*Prefix coed 60, men 61, women 62.

**Electives chosen from such courses as College Algebra; History of Western Civilization; Introduction to Sociology; Government of the U.S.; Health Educ.; Public Speaking; Modern Lang.; Art in the Culture; Music Appreciation; General Psych.

serving organizations and summer employment in social agencies are recommended for the college student interested in this vocation.

THE TEACHER EDUCATION PROGRAM

Towson has been preparing teachers for the public schools of Maryland for more than one hundred years. Out of this long experience have come the present three programs for teachers, directed toward three-grade-levels; early childhood education (pre-school through the third grade), elementary (first through sixth grades), and secondary (seventh through twelfth grades).

Professional education courses, comprising about twenty percent of the four years' work, consist of approximately two-thirds classwork at the College and one-third laboratory experiences, including student teaching in the classrooms of public school systems. Prior experience with children is strongly recommended for those seeking admission to student teaching.

Approximately forty percent of the college program is given over to studies of a general nature — in the humanities, the social sciences, and the natural sciences — providing a well-rounded college education. Certain basic courses are required, assuring foundations in all broad areas of knowledge; but even among these there are frequent choices, and beyond them is the opportunity for electives that make possible the pursuit of special interests.

The balance of the four years' work, approximately forty percent, is given over to electives which permit the student to develop competency in the field in which he will eventually teach or to pursue his special interests.

In general a student with a minimum of a 2.0 cumulative average is eligible to enter student teaching when (a) he has completed the required freshman and sophomore courses; and (b) he has completed all professional prerequisites. He must in addition have the approval of the Director of Laboratory Experiences to enter and remain in the student teaching program.

The teacher education program may lead directly to positions such as: nursery and kindergarten teaching, primary grade teaching, upper elementary teaching, junior and senior high school teaching, college teaching, special educational teaching, guidance work in schools, and librarianships in schools and public libraries.

With experience and additional training, graduates of the teacher education program may become administrators such as supervisors, principals, and superintendents.

Other vocations and areas of work in which teacher education graduates enter include: social work, religious education (including the ministry of education and the ministry of music), personnel work, recreation work, educational TV, audio-visual education in the schools and in business and industry; industrial education, programmed instruction in business and industry as well

as in the schools, the field of testing in education and in business and industry, and educational positions in governmental agencies.

Required courses for each area and suggested course sequences are listed under each area in the Education Department course descriptions.

Teaching Certificates

Each graduate of a teacher education program at Towson will be qualified for Maryland certification at the early childhood education, elementary, or high school level. Early childhood education graduates may teach nursery school, kindergarten, and grades one, two, and three. Elementary education graduates may teach grades one through six and they may teach an academic subject in grades seven, eight, or nine, provided they meet the content requirements for a secondary school certificate in this subject. Secondary school graduates may teach in grades seven through twelve, and grades six when departmentalized. The Standard Professional Certificate is issued for three years at graduation and is renewable for seven years upon completion of six semester hours of graduate or advanced undergraduate courses.

The Towson graduate program affords opportunity to qualify for the Advanced Professional Certificate. Thereafter a master's degree or "equivalent" is required for the Advanced Professional Certificate. Certification to teach in Baltimore City is based in part upon the passing of a professional examination.

General College Requirements for Bachelor's Degrees

All degree programs of the College are based upon a fundamental background of general studies. Work in four area disciplines of liberal arts or general education courses are required of all students working toward the Bachelor of Science or Bachelor of Arts degrees. Additional courses in general education are required of prospective early childhood and elementary school teachers; but it is possible, and sometimes desirable, to pursue a major in an academic field. Students pursuing a program in secondary education are required to complete a major in addition to required education courses.

Specialization

A major in an academic field is earned by completing about eight courses, generally, beyond the basic required courses in the chosen field—or about 36 credit hours of work, the exact amount being set by the various departments. Three possible benefits make the pursuit of a major course of study desirable: it prepares the student for graduate study in the field; it prevents a possible too-wide dispersion of effort which would result in a lack of real competency in any branch of knowledge; it qualifies the graduate from the

teacher education program to teach the subject in junior and senior high schools.

Students may select a major or approved department program from one of the following fields; art, business administration, biology, chemistry, economics, elementary education, elementary school science, English, geography, history, high school science, early childhood education, mathematics, modern foreign languages, music, music education, physical education, physics, political science, psychology, philosophy, sociology, social science, speech and dramatics, speech education. The required courses for programs are listed with department course descriptions.

Students are responsible for meeting in full the requirements for graduation as set forth in the College Bulletin. When the requirements are changed after a student has enrolled in the College, the student has the option of meeting in full the requirements that were in effect at the time of entrance or those that are in effect at the time of graduation, if graduation occurs within seven years of date of admission. If the student does not complete graduation requirements within seven years he must meet requirements in effect at the time of graduation. When the College withdraws former required courses, the Standards Committee will approve substitutions for students graduating under the former requirements. The student's advisor assists in the planning of a program, but the final responsibility for meeting the requirements for graduation rests with the student.

FOREIGN STUDY

Students with upperclass standing desiring to pursue study in a specialized academic area at a college or university outside the United States must make application and obtain College approval for the study program. The appropriate form for making application may be obtained at the Registrar's Office. Approval is gained through the department chairman of the academic area involved, who will assist the student in the selection of a program satisfactory to the department. For final approval, the department chairman will forward the proposed program to the Academic Standards Committee through the office of the Dean of the College. After the student has returned to the College, transfer credit for a program of study undertaken outside the United States will be granted only upon recommendation of the department chairman and after an evaluation has determined the student's successful completion of the program.

THE COOPERATIVE EDUCATION PROGRAM

The Cooperative Education Program at Towson State College is designed to foster an interchange of students between Towson State and the other State Colleges of Maryland as well as other institutions of higher learning in

the Baltimore Metropolitan area. The institutions included in the program are the State Colleges at Bowie, Coppin, Frostburg, Morgan, and Salisbury; and the private colleges, Goucher and Loyola. The program is also designed to allow students to take courses not ordinarily available at Towson as well as study under eminent professors in residence at other institutions. Students are encouraged to develop their academic curriculum with the Cooperative Education Program as an important part of their plans.

There are no additional costs to the student to participate in the Cooperative Program.

Students desiring information concerning the Cooperative Education Program should consult with the Coordinator of the Cooperative Education Program. Cooperative Education Program applications, participating college bulletins and class schedules are available from the Coordinator.

Academic Requirements

Students participating in the program are expected to maintain the same degree of proficiency in their academic studies at the cooperative institution as at Towson State.

Courses taken at the cooperative institution are part of the student's academic record, and the grades will be computed into the student's grade point average at Towson.

Only students who are in good standing academically in an undergraduate or graduate degree program are eligible to participate in the Cooperative Education Program.

Programs With The State Colleges — Coppin and Morgan

The State Colleges in the Baltimore metropolitan area are Coppin and Morgan. Students are especially encouraged to select courses from the curriculum of these two schools, since they are within easy commuting distance of Towson State.

Undergraduate (except freshmen) and graduate students are eligible to participate in the Cooperative Program. Undergraduate students may pursue courses of instruction equivalent to three semesters of fulltime work (54 credit hours). Graduate students are limited to 12 credit hours. Students can take an entire semester's academic load or any part of it at either Coppin, Morgan or both while in attendance at Towson.

Specially arranged courses are also offered to permit greater freedom of choice, especially those courses either taught by eminent professors or not ordinarily available at Towson.

Students may elect courses offered either in the day or evening.

Programs With The State Colleges — Bowie, Frostburg, and Salisbury

Students are encouraged to make use of the academic curriculum available at Bowie, Frostburg, and Salisbury. Distance precludes simultaneous part-time attendance at Towson and one of the other colleges. However, students can spend three full semesters at any one of the three colleges. Undergraduate students can elect up to 54 credit hours, and graduate students can elect up to 12 credit hours.

Programs With The Private Colleges — Loyola and Goucher

Towson has a Cooperative Education Program with both Loyola and Goucher. Undergraduate students (except freshmen) are eligible to participate in this program. Students are permitted to take only those courses which are not offered at Towson. Students interested in either Loyola or Goucher should consult with the Coordinator of the Cooperative Education Program.





GRADUATE STUDIES

Wilfred B. Hathaway, Director of Graduate Studies
Gilbert A. Brungardt, Coordinator of Music Education Program
Grayson S. Burrier, Coordinator of Secondary Education Program
Regina I. Fitzgerald, Coordinator of Elementary Education Program
Joseph P. Gutkoska, Coordinator of Reading Program
Billy D. Hauserman, Coordinator of Urban Teaching Program
Dell C. Kjer, Coordinator of Early Childhood Education Program
John B. Mitchell, Coordinator of Art Education Program
Edward Neulander, Coordinator of Guidance and Counseling Program
Herbert A. Siegel, Coordinator of School Psychology Program

PURPOSES

The programs leading to the Master of Education degree have been developed primarily to help school teachers, guidance counselors, and school psychologists increase their competency in the following general areas:

Art Education
Early Childhood Education
Elementary Education
Guidance and Counseling
Music Education
Reading
School Psychology
Secondary Education
Urban Teaching

*ADMISSION TO COURSES FOR GRADUATE CREDIT**

An applicant for admission to courses for graduate credit (classification: Graduate Student) must meet admission requirements in one of two ways: 1) By holding a master's or doctor's degree from a regionally accredited college or university, 2) By holding a bachelor's degree from a regionally accredited college or university and a grade average of 3.00 ("B"). The quality of graduate work taken beyond the bachelor's degree, either as post-baccalaure-

* The regulations contained in this Bulletin pertain only to those students who began their graduate studies after June 1, 1967.

ate (non-graduate credit) courses or graduate credit courses, will be evaluated as part of the undergraduate record. Recommendations from persons who can appraise the student's academic qualifications may be required.

An "Application for Admission as Graduate Student" must be filed in advance of the first enrollment at this College. The application and official copies of transcripts of all collegiate work must be filed with the Director of Graduate Studies no later than August 15 for the fall semester and January 1 for the spring semester. Those who are admitted as graduate students may register for courses numbered 100-699 but will receive graduate credit only in courses numbered 300-699 completed with grades of "C" or better. Service Courses and several 300-level and 400-level undergraduate prerequisite or specifically senior courses are not given graduate credit. In order to maintain the classification of graduate student, a good academic record must be achieved even if the student is not in a degree program.

ADVANCEMENT TO DEGREE CANDIDACY

Students admitted as graduate students are not candidates for a degree until all the requirements listed under "Advancement to Candidacy for the Master's Degree" have been met. However, all those who intend to apply at the appropriate time for advancement to degree candidacy should file a Program of Study with the Director of Graduate Studies during their first term of work at this College. This Program, listing all courses to be taken to meet degree requirements, must be approved by a graduate adviser. It also includes any undergraduate requirements the student may not have met. Students should consult the course requirements of the program in which they are interested for undergraduate requirements of the major areas of graduate work (Education, Psychology, Music or Art). However, all programs require or recommend that work be taken in departments outside one of these major areas. Since some departments may require a specific undergraduate background for graduate study in their areas (i.e., an undergraduate major or minor), students are urged to consult the graduate advisers of the appropriate departments for information about their policies. Such requirements are normally met by taking the necessary courses, but in special circumstances may be fulfilled by a reading program or by examination.

CANDIDATES FOR DEGREES AT OTHER INSTITUTIONS

A student who is a candidate for an advanced degree at another college or university may enroll as a graduate student at this College for occasional work. He must present, at least two weeks before registration, a letter from the Graduate Dean of his parent institution indicating that he is in good standing and that credit earned here is acceptable towards his degree.

ADMISSION TO COURSES FOR POST-BACCALAUREATE WORK (NON-DEGREE PROGRAMS)

Students who do not meet the standards required for classification as graduate student are permitted to register with the classification of non-graduate student and pursue non-degree programs. Non-graduate students may take courses at the 300-level and 400-level and earn graduate credit towards the Advanced Professional Certificate.

Non-graduate students pursuing non-degree programs at the post-baccalaureate level are required to file an "Application for Admission as Graduate Student" and a copy of all transcripts of all collegiate work in advance with the Director of Graduate Studies.

Students who believe they can meet the admission requirements for graduate student status but who fail to file the required application in advance must register as non-graduate for the semester. However, they will be considered for admission to graduate student status if their application and transcripts are received by the College before the end of the first quarter of the term. If they are admitted to graduate student status they will then be permitted to receive graduate credit for satisfactory completion of any 300-level and 400-level courses (except Service Courses and several undergraduate prerequisite or specifically senior courses) in which they may be enrolled.

THE QUALIFYING PROGRAM

A Qualifying Program has been designed to test the readiness for graduate work of those students whose academic achievement falls short of the standards required for graduate student status but whose records show promise on several other grounds. Those who pass the Qualifying Program are admitted to the status of graduate student. Information about this program may be obtained from the Director of Graduate Studies.

GRADUATE WORK BY SENIORS IN THIS COLLEGE

Seniors in their last semester of work at this College may take Upper Division and Graduate Division courses for graduate credit if they meet the following requirements: 1) The graduate courses must be in excess of the 128 hours required for the bachelor's degree, and 2) An application to the Director of Graduate Studies for Graduate Student classification (which requires a 3.00 average), submitted in advance (by August 15 for the fall semester, January 1 for the spring semester, and May 15 for the Summer Session), must be approved.

REQUIREMENTS FOR THE DEGREE OF MASTER OF EDUCATION

1. Advancement to Candidacy for the Master's Degree
An application for Advancement to Candidacy for the Master's Degree

may be made by graduate students after the completion of nine hours and before the completion of fifteen hours of graduate courses at this College. Over half of this work must have been taken in 500-level and 600-level courses. Application is made to the Director of Graduate Studies.

Evaluation of the application is based upon the completion of the following requirements:

- a) The filing of a Program of Study with the Director of Graduate Studies, if not done earlier. The Program, to be completed in consultation with an adviser, must be drawn up on forms provided by the Director of Graduate Studies. It may be revised at any time with the adviser's approval.
- b) A 3.00 average in all graduate work at this College.
- c) Acceptable scores on the Graduate Record Examination. This need not be retaken by those who passed the Qualifying Program.

Advancement to Candidacy in no case assures the student of a degree, but merely signifies that he is considered by his instructors sufficiently prepared and able to pursue such graduate study and research as are demanded by the requirements of the degree sought. Recommendations from persons who can appraise the candidate's professional experience may be required.

2. All requirements, including the comprehensive examination, and the thesis if applicable, must be completed by August of the seventh year of graduate study. This period of study is assumed to begin at the time the student is admitted to graduate student status.
3. Eighteen or more of the total required course credits for any degree program must be earned in 500-level and 600-level courses.
4. In order to remain in good standing, candidates for the Master of Education degree must maintain a 3.00 average after being advanced to degree candidacy. If the cumulative average falls below 3.00, the student will be placed on probation. If after completing nine more hours of work his cumulative average remains below 3.00, he will be dropped from candidacy; otherwise he will be restored to good standing. A student on probation will not be permitted to take comprehensive examinations leading to any degree. Required courses in which the candidate earns a grade of "D" must be repeated, since the grade does not confer graduate credit. In accordance with College policies both grades for the course will be computed in the student's cumulative average.
5. The thesis and seminar requirements of the programs which demand them represent a major part of the student's advanced study. The

thesis must demonstrate the student's ability to do independent research and to write effectively as evaluated by a thesis committee appointed by the Director of Graduate Studies. The seminar paper is a more modest undertaking, but must exhibit similar qualities of research and writing as evaluated by the professor teaching the seminar.

6. Each candidate for the Master of Education degree must take a final comprehensive examination not earlier than the term during which he will complete his course work. This examination is given three times a year, in April, July, and November. The examination may be repeated only once. It is the responsibility of the student to inform the Graduate Office at least one month prior to the examination of readiness to take the examination. Students presenting a thesis in partial fulfillment of their degree requirements will be required to take an oral examination on the thesis.

CREDIT TRANSFERRED FROM OTHER COLLEGES

A maximum of six hours of graduate credit may be transferred from other regionally accredited colleges or universities and counted towards the Master of Education degree. A request for transfer credit for courses taken before enrollment as a graduate student at this College should be submitted at the time the student files a Program of Study. If he wishes to take work elsewhere after filing this Program, he must apply in writing to the Director of Graduate Studies for permission. Normally, approval will be given only for courses which are not offered by this college during the period of the student's attendance. Only courses in which grades of "A" or "B" have been earned are transferable. The candidate is subject to final examination on all work offered for the degree.

All course work to be transferred, like credit earned at this College, must have been taken within the seven-year period of study in order to be counted towards the degree.

For further information refer to the Graduate Studies Bulletin.

NOTE: The Board of Trustees has recently approved two programs as follows: Master of Science in Biology, Master of Arts in Geography. For information concerning these programs, the student should consult the Director of Graduate Studies.

COURSE DESCRIPTIONS

THE MEANING OF COURSE NUMBERS

Each department of the College has one or more code numbers and abbreviations for each general subject area (e.g., French in the Modern Language Department). The code abbreviations are shown in parenthesis at the head of the course listings. The code numbers form a two digit Subject Classification Number, which precedes a three digit Course Classification Number, forming a five digit Course Number. Each course has a distinctive number, with the following significance:

COURSE CLASSIFICATION NUMBERS	SIGNIFICANCE OF NUMBERS
.001-.008	Two Year Experimental Courses.
.009-.099	Service Division Special Courses with credit and Service Courses with no credit.
.101-.299	Lower Division Undergraduate Courses.
.301-.499	Upper Division Undergraduate and Graduate Courses.
.501-.699	Graduate Division Courses.

Semesters of a year course whose numbers are separated by a hyphen are to be taken in sequence. When course numbers are separated by a comma, either semester may be taken independently of the other. Old course numbers appear in parenthesis.

ELECTIVE COURSES

Students majoring in the various areas will need to choose their electives with extreme care. Before registering for courses which are not required students should consult their advisers. The advice of the instructor in the course or the chairman of the department in which the elective course is listed may be needed before a wise decision is made concerning the choice of an elective.

CREDIT VALUE OF COURSES

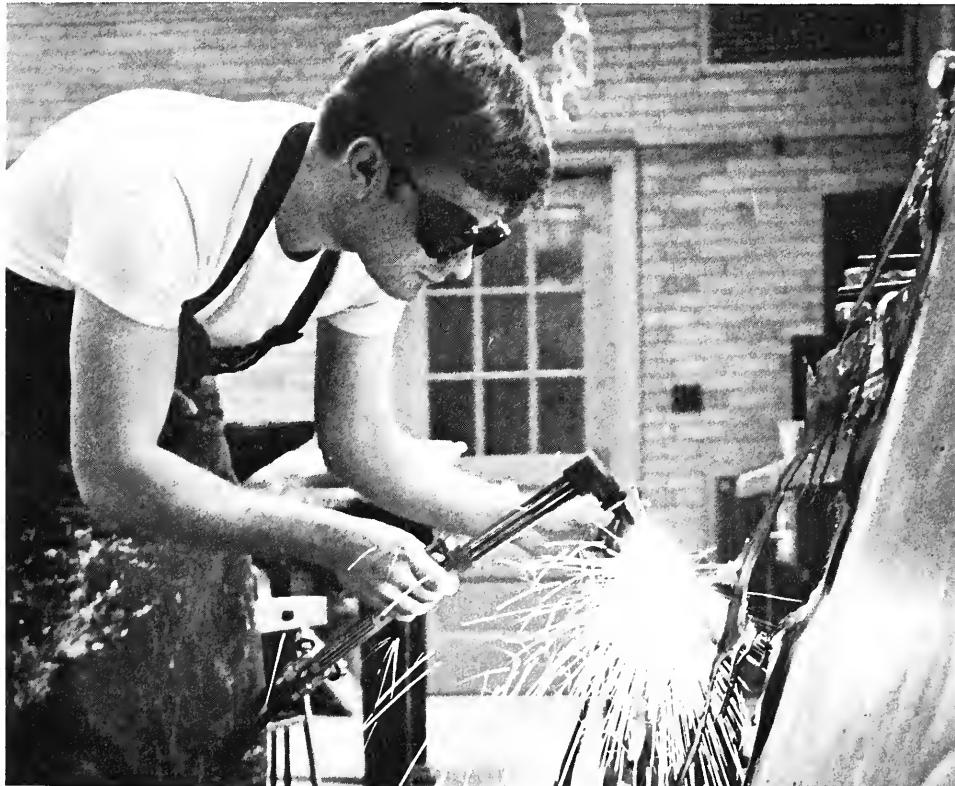
The semester credit value of the course is indicated in the parenthesis following the title.

TIME OF OFFERING

All required courses are usually offered each semester. Elective courses in each department are usually offered at least one semester each year. All non-required courses are offered subject to sufficient enrollment.

PREREQUISITES

The order in which courses may be taken is determined by the prerequisites of all courses to be taken.



Programs of Study

See Addendum for Additional Information

ART

Professors: MITCHELL, ZINDLER, MILLER

Associate Professors: GUILLAUME, POLLACK (*Chairman*)

Assistant Professors: CUBBISON, FLOOD, KIRSTEL, NASS

Instructors: FIX, GILCHRIEST, JACOBSON, PAULSEN, ROBB, SUPENSKY

Art courses contribute to the student's understanding of the functions of the visual and plastic arts in the shaping of environment. Visual education and participation in the arts are essential in the process of education. The department provides a major and a minor in art and a major in art education leading to teacher certification. The department also offers a masters program leading to the Master of Education in Art Education.

ART MAJOR

All prospective art majors and minors must register with Art Department as early as possible during the first year on campus. The purposes of a major in art are to provide a background for personal creativity, to prepare for graduate work, and to provide a foundation for a career in art. Required courses are: 12.103, 12.104, 12.111, 12.121, 12.122, 12.229, 12.230, 12.231, 12.240 or 12.241 and a course in Graphic Processes.

In addition, art courses are required to reach the minimum total of 38 credits. The Art Department may require upper class students to undertake independent study from an individually selected bibliography. Participation in the annual student exhibit is required. The department reserves the privilege of retaining student work, including rights of reproduction and publication.

ART EDUCATION MAJOR

For teaching certificates in art on the elementary and secondary levels (dual certification) the required art courses are those listed for an Art Major plus 12.225, the first eleven courses listed above, 12.225, 12.475, 12.479, Educ. 28.319, Psychology 70.203 must precede student teaching.

Transfer students must have registered for fifteen approved credits with this department as a prerequisite for 12.475-479, the prerequisite for student teaching in art is 12.475-479.

ART MINOR

Students who wish a minor in art should select the following courses: 12.103, 12.104, 12.111, 12.121 or 12.122, 12.229 or 12.230, 12.240 or 12.241. In addition to these courses the student should select additional credits to have a minimum total of 20 credit hours in Art.

ART COURSES

Lower Division – Undergraduate

12.103 (103) TWO DIMENSIONAL DESIGN (2) Elements and Principles of two dimensional design and aspects of their application. Studio & discussion.

12.104 (310) THREE DIMENSIONAL DESIGN (2) An introduction to three dimensional concepts as they relate to the elements and principles of design. Form and space problems involving various materials, tools and techniques. Prerequisite: 12.103.

12.105 (203) ART IN THE CULTURE (2) Investigation of the relationship between cultural values and art forms. Analysis of form in the graphic and plastic arts including: architecture, crafts and industrial design. Slide lectures, discussions, readings and museum visits.

12.106 DRAWING AND PAINTING FOR NON-ART MAJORS (2) An introductory course for non-art majors. Studio experience in drawing and painting. Critiques and museum visits.

12.111 (211) DRAWING AND THE APPRECIATION OF DRAWING I (2) Problems of expressive draftsmanship in theory and practice. Drawing from the costumed and nude figure.

12.121 (321) ANCIENT, MEDIEVAL AND RENAISSANCE ART (3) An historical survey of art. Slide lectures, directed readings and museum trips.

12.122 (322) BAROQUE TO CONTEMPORARY ART (3) An historical survey of art. Slide lectures, directed readings and museum trips.

12.202 ADVANCED DESIGN (2) The application of aesthetic principles to graphic and plastic problems. Emphasis on independent investigation. Prerequisites: 12.103, 12.104.

12.205 (305) THE ART OF PUPPETRY AND MARIONETTE PRODUCTION (2) Design and construction of puppets and marionettes; adapting plays, stories, and events; designing and constructing scenery; lighting; production.

12.206 (306) ARCHITECTURAL CONCEPTS (2) The organization of space and materials for human needs. Contemporary and historical aspects of the design of private and public buildings and of communities. Lectures and Discussion.

12.211 (311) DRAWING II (2) Continued studio work in drawing; landscape, still life and figure. Prerequisite: 12.111.

12.215 PROJECTIVE DRAWING (2) Methods of perspective, orthographic and isometric projections. The use of various media in the rendering of three dimensional form.

12.220 (320) EXHIBITION TECHNIQUES (2-3) Materials, techniques, and methods for the effective presentation of informational materials. The design of bulletin boards, exhibit spaces, display stands. Prerequisite: 12.103, 12.104 or consent of instructor.

12.225 (325) DESIGN FOR COMMERCIAL ART (2) Drawing, painting, lettering and typography as visual communication. Prerequisite: 12.103.

12.227 (327) DESIGN IN WOOD AND METAL (2) Design problems executed in wood and metal. Instruction in forming, joining and finishing woods and metals. Aesthetic and historic considerations of the media. Prerequisite: 12.103, 12.104 or consent of instructor.

12.229 (329) OIL PAINTING AND RELATED MEDIA I (3) Varied approaches to painting and a variety of media (e.g. acrylic, encaustic, oil painting) are explored through demonstration and experimentation. Prerequisite: 12.103.

12.230 (330) WATER COLOR AND RELATED MEDIA I (3) Varied approaches to water color and a variety of media (e.g. gouache, casein, watercolor) are explored through demonstration and experimentation. Prerequisite: 12.103.

12.231 (331) CERAMICS I (3) Creative investigation of ceramic materials. Studio work, lectures and discussions on ceramic design, techniques and materials. Prerequisite: 12.103, 12.104 or consent of instructor.

12.240 (340) SCULPTURE: THE HUMAN FIGURE (3) An introduction to the use of the human figure in sculpture. Clay modeling from the nude, with experience in direct plaster modeling and plaster casting. Prerequisites: 12.103, 12.104.

12.241 SCULPTURE: CONTEMPORARY MEDIA AND CONCEPTS (3) Technical and aesthetic considerations in the use of current sculptural concepts and media, including lights, kinetics, sound, plastics, etc. Prerequisites: 12.103, 12.104.

Upper Division – Undergraduate and Graduate

12.314 THE ART OF ENAMELING ON METAL (2) Design as applied to the art of enameling on copper and silver. The appreciation of master works of enameling from medieval to contemporary times. Studio work and lectures. Prerequisites: 12.103, 12.104. (Not for Graduate Credit.)

12.318 (418) JEWELRY (2) Investigation into aesthetics, history, function and design of jewelry. Lecture and directed studio problems in forming, joining and finishing of metallic and non-metallic materials. Prerequisite: 12.227 or consent of instructor.

12.323 (423) PICASSO TO THE PRESENT (3) Art History with emphasis on painting from 1900 to the present. Slide lectures, directed readings and museum trips. Prerequisites: 12.121, and 12.122.

12.324 HENRY MOORE TO THE PRESENT (3) Art History with emphasis on sculpture from 1900 to the present including new media and happenings. Directed readings and museum trips. Prerequisites: 12.121 and 12.122.

12.325 FRANK LLOYD WRIGHT TO THE PRESENT (3) Art History with emphasis on architecture from 1900 to the present including time-space concepts. Prerequisites: 12.121 and 12.122.

12.328 WEAVING AND TEXTILE DESIGN (2) Design problems executed with fibers and fabrics. Instruction in weaving, dyeing, printing, and stitchery. Aesthetic and historic considerations of the media. Prerequisite: 12.103, 12.104 or consent of instructor. (Not for Graduate Credit.)

12.329 (429) OIL PAINTING AND RELATED MEDIA II (3) Continued studio experiences in painting. Prerequisite: 12.229 or consent of instructor. (Not for Graduate Credit.)

12.330 (430) WATERCOLOR AND RELATED MEDIA II (3) Continued studio experiences in painting. Prerequisite: 12.230 or consent of instructor. (Not for Graduate Credit.)

12.331 (431) CERAMICS II (3) Continued studio experiences in ceramics. Prerequisite: 12.231. (Not for Graduate Credit.)

12.339 METAL SCULPTURE (3) Conceptual and technical problems involved in forging, forming, welding, soldering and finishing both ferrous and non-ferrous metals. Prerequisite: 12.240 or 12.241. (Not for Graduate Credit.)

12.340 (440) SCULPTURE: ADDATIVE PROCESSES (3) Continued studio problems from the figure with emphasis on the additive processes: clay, plasters, cements, epoxies, etc. Prerequisite: 240. (Not for Graduate Credit.)

12.347 SCREEN PROCESS (3) Personal expression in traditional and experimental techniques of screen printing: Serigraphy in color, tusche, stencil, glue. Prerequisite: 12.103, 12.111 or consent of instructor. (Not for Graduate Credit.)

12.349 RELIEF PROCESS (3) Personal expression in printmaking: Woodcut, wood engraving, linocut, subtractive color printing and other relief processes. Prerequisite: 12.103, 12.111 or consent of instructor. (Not for Graduate Credit.)

12.371 ART AND THE CHILD (2-3) Major considerations of art education appropriate to the work of the elementary teacher; experiences with art materials. (Not for Graduate Credit.)

12.405 ART PRINCIPLES AND CRITICISM (2) Principle concepts of art; theories of perception and aesthetics; application of theories to the interpretation of specific works of art. Prerequisite: 12.105 or 12.121 or 12.122.

12.414-415 ADVANCED STUDIO (2-4, 2-4) Practice for advanced students in their fields of special interest. Prerequisite: Courses in the field of special interest and permission of Department Chairman.

12.449 INTAGLIO PROCESS (3) Personal expression in printmaking: Etching, drypoint, aquatint, engraving, and other intaglio processes. Prerequisite: 12.103, 12.111 or consent of instructor.

12.451 LITHOGRAPHIC PROCESS (3) Personal expression through printing from Litho stones and plates. Prerequisite: 12.103, 12.111 or consent of instructor.

12.455 PRO-SEMINAR IN THE TEACHING OF ART (3) A professional seminar for Art Education majors. Discussion of problems in the current teaching experience. Prerequisite: Permission of Department Chairman. Concurrent with student teaching.

12.471 ADVANCED ART EDUCATION (3) Major art education, problems at all levels; materials and skills in relation to classroom needs. Prerequisite: 12.371 or equivalent.

12.475 (375) TEACHING ART IN THE ELEMENTARY SCHOOL (2) Concurrent course with 479, Art in the Secondary School. For course description see 479. Open only to Art Education Majors. Prerequisite: Approval of Art Department.

12.479 (379) TEACHING ART IN THE SECONDARY SCHOOL (2) Theoretic basis of art education, the function of the art specialist, and instructional materials and skills. Concurrent course with 475. Open only to art education majors. Prerequisite: Approval of Art Department.

12.485 SEMINAR IN ART HISTORY (2) Intensive analysis of a defined historical period or stylistic development in art. Directed readings in both period and contemporary sources. Discussions and museum tours. Prerequisites: 12.121 and 12.122 or consent of instructor.

Graduate Division

12.511 DRAWING (2) Advanced problems in expressive draftsmanship. Prerequisites: 12.211 or consent of instructor.

12.514-515 GRADUATE STUDIO (2-4, 2-4) Independent work in field of special interest with weekly criticism by staff. Prerequisites: Undergraduate work in field of specialization, permission of Department Chairman.

12.529 OIL PAINTING (3) For students with previous experience in painting, consideration of current trends and styles; studio work, museum visits, lectures. Prerequisite: 12.329 or equivalent.

12.530 WATERCOLOR (3) Consideration of current trends and outstanding painters and styles. Studio work, museum visits, lectures. Prerequisites: 12.330 or consent of instructor.

12.531 CERAMICS (3) Advanced work in ceramic design and techniques of glazes, clay bodies, firing. Prerequisites: 12.331 or consent of instructor.

12.540 SCULPTURE (3) For students with previous experience in sculpture; consideration of current trends and styles; studio work, museum visits, lectures. Prerequisites: 12.340 or 12.241 and 12.339 or consent of instructor.

12.551 GRAPHICS: INTAGLIO, RELIEF (2) Studio work for artists with a basic knowledge of intaglio and/or relief processes. Aspects of mixed media explored. Prerequisites: 12.349 or 12.449

12.553 GRAPHICS: LITHOGRAPHY, SERIGRAPHY (2) Studio work for artists with a basic knowledge of lithography and/or serigraphy. Prerequisites: 12.347 or 12.451 or equivalent.

12.595 RESEARCH IN ART AND ART EDUCATION (3) Methods of research applicable to art and art education. Examination of recent research in this field. Students will explore areas of their choice. Prerequisites: Consent of instructor.

12.697 SEMINAR IN ART EDUCATION (3) Investigation of problems in art education and related fields; examination of theories of art and art education, discussion of forces affecting contemporary art education. Prerequisite: 12.595 and consent of instructor.

12.699 ART THESIS: CREATIVE PROJECT (3) if approved, student will pursue his project resulting in an exhibition of his work plus a paper defining the project's scope and philosophy. Prerequisites: 12.697 and consent of the department.

The following art education courses are supervised by members of the art faculty Course descriptions will be found under the Education Department.

26.487 (390) STUDENT TEACHING IN ELEMENTARY SCHOOL ART
 27.398 (390) STUDENT TEACHING IN SECONDARY SCHOOL ART

AUDIOVISUAL COMMUNICATIONS

Professor: LOGAN (Chairman and Director of Instructional Services)

Assistant Professor: GEHRING, WEST

Instructor: BURTON

Audiovisual communications are becoming increasingly more important as modern education becomes more complex in keeping with the development and trends of society in areas such as urbanization, technology, and the accumulation of new knowledge. Under the pressure of a rapidly expanding population to be educated, more and more reliance will be placed upon the effective utilization of audiovisual communications.

Consequently, the audiovisual communications curriculum has been designed to meet the needs of different types of potential users . . . undergraduate students, especially prospective teachers, who have had limited contact and experience with this field; those seeking advanced degrees or who desire to know more about the rapidly developing field of instructional equipment, devices, and materials; and those who have the task of organizing practical audiovisual programs including audiovisual coordinators, administrators, directors of youth activities and religious education, government and industrial personnel, media specialists and librarians.

The Audiovisual Communications Department works closely with the different academic departments on the campus and endeavors to furnish instructional support where required. Though no major is offered in audiovisual communications at the present time, courses are open as electives to all students of junior or senior standing except courses 13.369 which is required by all secondary education majors prior to their graduation.

AUDIOVISUAL COMMUNICATIONS COURSES (AVCO)

Upper Division — Undergraduate Only

13.301 SURVEY OF INSTRUCTIONAL MEDIA (3) Demonstrations and supervised experiences are provided to emphasize skills and techniques used to operate basic multisensory equipment and devices used in the classroom. Contributions, values, and principles of audiovisual communications are correlated with utilization of equipment and devices. Not open to students who have taken 13.315 Methods and Materials in New Education Media.

13.302 METHODS AND MATERIALS IN INSTRUCTIONAL MEDIA (3) Stressed are the skills used in the preparation and production of selected types of sensory materials of instruction. Various methods and techniques are also employed to demonstrate how these materials can be utilized effectively in instructional communications. Prerequisites: 13.301, 13.315, or 13.369.

13.315 METHODS AND MATERIALS IN NEW EDUCATIONAL MEDIA (3) Methods of vitalizing learning through the use of motion pictures, television, audio and video recording field trips, transparencies, filmstrips, slides, and pictures; location of materials, operation of basic equipment and devices; preparation of basic tools of learning.

13.369 LABORATORY IN NEW EDUCATIONAL MEDIA (1 or 2) Experience in operation of multi-sensory aids to teaching, preparation of teaching aids, and application of transparencies, tape and video recordings, slides, filmstrips, motion pictures and still pictures to the modern classroom.

- Required of all Secondary Education majors during student teaching: course 315, or 301 may also be used to fulfill this requirement.
- Not open to students who have completed AVCO 301 or 315.

Upper Division — Undergraduate and Graduate

13.417 CLASSIFICATION AND CATALOGING OF AUDIOVISUAL MATERIALS (3) Emphasis is placed on all types of classifying and cataloging non-print materials in accordance with the Dewey Decimal System. Other systems of classification and cataloging are surveyed. Rules for form of entry, factors determining choice and form of subject heading and descriptive cataloging are studied. This course is designed especially for librarians, media specialists, and teachers. Audiovisual equipment, devices, and materials are used to optimum advantage throughout.

13.433 INSTRUCTIONAL TELEVISION (3) This course is concerned with ITV systems and terminology, the ITV movement, elements of production, classroom utilization of the ITV product, developing the ITV workshop, careers in ITV, and aspects of administration, philosophy, evaluation, and research in ITV. Class projects and the utilization of television equipment play a role in the course.

13.485 SEMINAR WORKSHOP IN EDUCATIONAL TECHNOLOGY (3) Special problems in educational technology are treated including the philosophy, scope, planning and techniques of the preparation and production and selected types of photographic instruction, dial access information and retrieval systems, simulators and trainers as well as significant developments in "hardware" and "software" are also stressed. Prerequisite: Three (3) hours of audiovisual communications or departmental approval. (Enrollment limited to 22.)

13.487 THEORY AND TECHNIQUES OF LINEAR PROGRAMMING (3) Acquaints students with philosophy and principles of linear programming; analysis and evaluation of commercially prepared and instructor-made programs; instructional utilization; current research, developments, and trends. An opportunity is provided for the student to develop a linear program in his own area of concentration. Prerequisite: Teaching experience and departmental approval.

13.488 THEORY & TECHNIQUES OF INTRINSIC PROGRAMMING (3) Acquaints students with philosophy and principles of intrinsic programming; analysis and evaluation of commercially prepared in instructor-made programs; instructional utilization; current research, developments, and trends. An opportunity is provided for the student to develop a intrinsic program in his own area of concentration. Prerequisite: Teaching experience and departmental approval.
LAB FEE \$5.00.

Graduate Division

13.501 ORGANIZATION, ADMINISTRATION & SUPERVISION OF AUDIOVISUAL COMMUNICATIONS PROGRAM (3) Organizational patterns, management procedures, and supervisory methods and techniques for audiovisual communications programs are considered. Major topics include: facilities; finance; selection, procurement, security and basic maintenance of equipment and materials; center operation; extension and in-service programs; assessments of systems and programs; and public relations. Prerequisite: six hours of audiovisual or departmental approval.

13.689 INTERNSHIP IN AUDIOVISUAL COMMUNICATIONS (3) Practical experience in audiovisual communications is provided. The intern will work cooperatively under the direction of an appropriate College faculty member and appropriate audiovisual field supervisor. He will engage in all aspects of the school system program as related to audiovisual communications. In addition, he will become familiar, through visitation with State and national audiovisual communications programs. Prerequisite: Six (6) hours of audiovisual communications and departmental approval.

13.695 THEORY AND RESEARCH IN AUDIOVISUAL COMMUNICATIONS (3) Basic elements of communications theory are studied and applied to audiovisual communications. Relationships between the learning process and perception are reviewed in terms of communications. Selected communications systems are examined and research in audiovisual communications is analyzed and discussed. Prerequisite: 6 hours of audiovisual or departmental approval.



BIOLOGICAL SCIENCES

Professors: ERICKSON (Chairman,) ODELL

Associate Professors: ANDERSON, CROOK, MUMA, WALKER

Assistant Professors: BUCHANAN, CASTELLI, CAULWELL, HILTON, KUNDIG, MORSINK, SHOEMAKER, WINDLER

Instructors: GIESLER, JOHNSON, LAUTERBACH, MECHLING, SCARSELLA, SCHUETZ, SCHURMAN

Assistant Instructors: ERICKSON, LIS

Students interested in biologically oriented careers in teaching, fundamental and industrial research, medicine, medical technology, dentistry, pharmacy, nursing, veterinary science, conservation and allied fields should major in this department. Staff members will aid each student in designing a program to meet his special needs.

BIOLOGY MAJOR

The requirements for the major are: Biology 14.101, 14.105, 14.109, 14.331, 14.351, 14.401, and six credit hours from other courses offered by the department; Chemistry 22.101, 22.102, and 22.231; Physics 66.211 and 66.212; Mathematics 50.115.

Biology 14.113, 14.114, and 14.301 may not be included in the basic 30 hours required for the major without permission of the department chairman.

Honors Program: To graduate with honors in biology a student must complete Biology 14.485-486 (14.485 to be taken in junior year, 14.486 to be taken in senior year) and 14.497-14.498 to be taken in consecutive semesters of the senior year. The research thesis must be presented in an oral defense before the Honors Research Committee. An oral presentation open to the public is also required. In addition, a minimum of three credit hours must be selected from 14.491 and/or 14.481 in the junior year. For eligibility and general information consult the College Honors Program description.

MEDICAL TECHNOLOGY

The four year program is designed to prepare para-medical personnel for specialized work in hospital and medical laboratories and leads to the Bachelor of Science degree in Medical Technology. It provides sufficient background for the student to pass the medical technologist's examination for certification.

Requirements are:

- A. Ninety-six credit hours to be completed in the first three years at Towson including:
 - Biology 14.101, 14.105, 14.109 and 8 elective hours in biology.
 - Chemistry 22.101, 22.102, and 8 elective hours in chemistry.
 - One course in mathematics
 - General Education requirements of the College.
- B. Thirty-two credit hours to be completed at the Union Memorial Hospital or St. Joseph's Hospital (to be determined by Towson) during the fourth year (a twelve month course of study). The hospital program includes:

MEDICAL TECHNOLOGY COURSES (MDTC)

Upper Division – Undergraduate Only

- 51.401-402 BLOOD BANK (0, 3) Methods used in collecting blood and procedures required in preparing blood for blood bank.
- 51.403-404 CLINICAL BIOCHEMISTRY (0, 8) Biochemical tests used in all medical diagnosis.
- 51.405-406 HEMATOLOGY (0, 8) Blood cell morphology and various tests to determine their presence.
- 51.407-408 HISTOLOGIC TECHNIQUE (0, 2) Methods and stains used in preparing smears and permanent slides of tissues.
- 51.409-410 DIAGNOSTIC MICROBIOLOGY (0, 5) Stain preparations and chemical tests used in identifying bacteria and in diagnosing diseases caused by them.
- 51.411-412 HUMAN PARASITOLOGY (0, 2) Microscopic identifications of all disease producing organisms other than those caused by bacteria.
- 51.413-414 SEROLOGY (0, 2) Identifications of the types of serous fluids and interpretations of tests showing these types.
- 51.415-416 URINALYSIS (0, 2) Microscopic observations and chemical tests necessary to identify materials present in urine.

Before beginning the fourth year of work at the affiliated hospital, students must attain at least a 2.0 cumulative average.

NATURAL SCIENCE MAJOR

The program is designed to give a broader view of the sciences than obtained in a traditional undergraduate major in a single science. This is done

at the sacrifice of depth and students should, therefore, be aware that this major will not prepare them for graduate work in a single science. Course requirements are: Biology 14.101, 14.105, 14.109, 14.291 (or Physical Science 64.401), Chemistry 22.101, 22.102, 22.211, or 22.231, Physical Science 64.121, 64.211, Physics 66.211-212, science electives (including one field course) for 11 credit hours, and Mathematics 50.115, for a total of 54 hours in science and mathematics.

Prospective secondary school teachers of general science should elect this major. To meet State Certification requirements at least 18 hours must be taken in either biology, chemistry, or physics; 6 semester hours are required in each of the other fields.

BIOLOGY COURSES (BIOL)

NOTE: 14.101 is a prerequisite for all other biology courses. For details on exemption from this required course, see the Academic Regulations section of this bulletin.

Lower Division -- Undergraduate

14.101 (103) FUNDAMENTALS OF BIOLOGY (4) The basic biological principles common to plants and animals. Topics include cell structure and processes (both physical and biochemical), mitosis, gametogenesis, aspects of embryology, genetics, evolution, ecology, and an overview of the animal and plant kingdoms. Average of two laboratory hours per week. Each semester.

14.105 (204) GENERAL BOTANY (4) Morphology, anatomy, and physiology explored through the study of selected plant types. Average of three laboratory hours per week. Each semester.

14.109 (214) FUNCTIONAL ANATOMY OF VERTEBRATES (4) Organ systems of selected vertebrate types with emphasis on basic physiological processes. Laboratory dissections. Average of two hours per week in laboratory work. Students who have taken 14.113-114 Human Anatomy and Physiology may not take this course. Each semester.

14.113-114 (209-210) HUMAN ANATOMY AND PHYSIOLOGY (4, 4) Skeletal, muscular, nervous, respiratory, circulatory, digestive, excretory, endocrine, and reproductive systems. Average of two laboratory hours per week. If course is to be used toward the fulfillment of the general course requirement of all students, both semesters must be completed. Courses must be taken in sequence except with special permission of the instructor. Students who have completed 14.109, Functional Anatomy of Vertebrates, may not take this course without permission of the Department. 14.113 fall, each year; 14.114, spring, each year.

14.195 (...) COURSE RESEARCH (1) By invitation or with the consent of the instructor. Research related to a specific course successfully completed by the student. Each semester.

14.207 (229) INTRODUCTION TO PALEONTOLOGY (4) Examination of major forms of life with the emphasis on appearances, diversification, and extinctions during the different geologic periods. Fall, odd years.

14.235 (...) ECONOMIC BOTANY (2) A study of the plants and plant products which provide man with various luxuries and necessities. Emphasis will be on higher plants commercially important in North America. Prerequisite: 14.105 or consent of instructor. Fall, odd years.

14.291 (396) INTRODUCTION TO RESEARCH (2) Laboratory work of an advanced nature under the guidance of the department. Each student will present and defend his work at a seminar. Prerequisite: consent of instructor. Each semester.

14.295 (295) COURSE RESEARCH (1) By invitation or with the consent of the instructor. Research related to a specific course successfully completed by the student. Each semester.

Upper Division – Undergraduate and Graduate

14.301 (401) FIELD NATURAL SCIENCE (4) A study of various natural environments to determine their physical and biological components and to understand the relationship of these forms to one another and to man. Emphasis is on field observation. An average of three laboratory hours per week. Each semester.

14.303 LIFE SCIENCE FOR THE ELEMENTARY TEACHER (3) Emphases placed on the conceptual approach to science teaching, the modes of scientific inquiry, and the utilization of living organisms in the classroom. Prerequisite: 14.101. Each semester.

14.304 (403) GENERAL ECOLOGY (3) Basic principles of ecology. Interrelationships between animals and plants and their natural environments, emphasizing the specific biomes available for study in Maryland. Studies will be based on observations and data collected in the field. An average of two laboratory hours per week. Spring, odd years.

14.310 (471) ENVIRONMENTAL CONSERVATION (4) Basic conservation practices and problems. Soil, water, forest, and wildlife resources with emphasis on interrelationships. Specialists in various phases of local, state, and federal conservation work conduct or assist in the conduct of numerous field trips. Average of two laboratory hours per week. Spring, even years.

14.318 (407) MICROBIOLOGY (4) Principally a laboratory course investigating such groups of organisms as bacteria, protozoa, and lower plant forms, with emphasis on bacteria. Average of three laboratory hours per week. Prerequisite: CHEM 22.101, 22.102, may be taken concurrently. Spring, odd years.

14.322 (421) MICROTECHNIQUE (3) Techniques used in preparation of plant and animal tissues for histological examination. Average of two laboratory hours per week. Prerequisites: CHEM 22.101, 22.102. Spring, even years.

14.331 (205) FIELD AND SYSTEMATIC BOTANY (4) Plant kingdom centered around taxonomy and ecology. Methods of collection, identification, and preservation will be developed in the field and laboratory. Average of three laboratory hours per week. Prerequisite: 14.105 or consent of instructor. Each semester.

14.341 (...) PHYCOLOGY (4) The systematics, structure, ecology, physiology, and life-histories of algae. Laboratory will include methods of collection, culture, and experimental study of selected species. Prerequisite: 14.105. Fall, even years.

14.345 (445) MYCOLOGY (4) An introductory study of the morphology, classification, life histories, and economic applications of the fungi. Average of three laboratory hours per week. Prerequisite: 14.105. Fall, even years.

14.351 (355) FIELD AND SYSTEMATIC VERTEBRATE ZOOLOGY (4) Evolution, distribution, and definitive features of each class are studied comparatively. Extensive field and laboratory work deals with morphologic, taxonomic, ecological, and behavioral features of selected vertebrate groups and species. Average of three laboratory hours per week. Each semester.

14.353 (453) INVERTEBRATE ZOOLOGY (4) Aquatic and terrestrial species of phyla from the Protozoa through the Echniodermata with special emphasis on local forms. Insects are not considered. Economic, ecological, and taxonomic considerations. Average of three laboratory hours per week. Fall, odd years.

14.360 (422) HISTOLOGY (3) Tissues of the vertebrate body. Average of two laboratory hours per week. Prerequisite: 14.109. Spring, odd years.

14.371 (451) ANIMAL BEHAVIOR (3) The classification and evolutionary aspects of behavior with emphasis on behavioral mechanisms. An average of two laboratory hours per week. Fall, odd years.

14.381 (493) BIOLOGICAL LITERATURE (2) Familiarization with the literature of biology through the preparation of papers requiring a knowledge of techniques for exploring the literature. Two one-hour lectures per week. Prerequisite: at least 6 hours of biology. Each semester.

14.383 (391) CLASSICAL AND CONTEMPORARY READINGS IN THE BIOLOGICAL SCIENCES (2) Historical development of biological concepts through the reading of classical and contemporary writings. Fall, each year.

14.385 (489) SELECTED GENERAL PRINCIPLES IN BIOLOGY (3) Current directions of biological investigations will be discussed together with a treatment of recent contributions to biological areas and principles. Sufficient background will be given to provide coherence and understanding. Three one-hour lectures. Prerequisite: consent of instructor. Evening and summer programs. Not for graduate credit, but for recertification.

14.395 (395) COURSE RESEARCH (1) By invitation or with the consent of the instructor. Research related to a specific course successfully completed by the student. Each semester.

14.401 (411) GENETICS (4) Heredity and variation, and their application to evolution and development. Gene action at the morphological, physiological and biochemical levels. Laboratory work entails use of *Drosophila*, corn, and *Neurospora* in the application of genetic principles. Average of two laboratory hours per week. Prerequisites: CHEM 22.102 and 50.115 Math I or consent of instructor. Each semester.

14.403 (412) ADVANCED GENETICS (3) Emphasis on the molecular basis of gene action. Discussion of current work and methods related to the problem of gene structure, function, and mutation including the translation and regulation of genetic information. Prerequisite: 14.401. Fall, odd years.

14.408 (409) CELL BIOLOGY (4) A study of the molecular and morphological organization of the cell in relationship to functions of the cells organoids. An average of three laboratory hours per week. Prerequisites: 14.105, 14.109, CHEM 22.231. Spring, even years.

14.411 (405) WILDLIFE BIOLOGY (4) Important wildlife species with emphasis on aspects of research and management. Specific techniques and problems are studied in the field. Average of two hours per week in laboratory and field work. Prerequisite: Permission of instructor. Fall, even years.

14.429 (429) BIOANALYSIS (3) Microscopic and biochemical methods used in determining major components and important contaminants of feeds, spices, stabilizers, adhesives, bakery materials, fats and oils, meat products, crystal mixtures, dairy products, etc. An average of two hours per week in laboratory and field work. Prerequisite: permission of instructor. Evening and summer programs.

14.432 (...) VASCULAR PLANT TAXONOMY (4) A study of the history and principles of vascular plant systematics with laboratory time devoted to collection and identification of plants in the local flora. Prerequisites: 14.105 and 14.331. Spring, even years.

14.433 PLANT SPECIATION (3) A study of such speciation phenomena as race isolation, hybridity, polyploidy, apomixis, and self-compatibility as they influence the evolution of new populations. Prerequisite: 14.331. Fall, even years.

14.436 (437) PLANT PHYSIOLOGY (4) Life functions of plants as related to structure at all levels: cells, organs, and the complete organism. Consideration of the interaction of environmental and genetic factors on plant metabolism. Average of three laboratory hours per week. Prerequisites: 14.105 and CHEM 22.101, 22.102. CHEM 22.231 recommended. Spring, odd years.

14.439 PLANT ANATOMY (4) Origin and development of organs and tissue systems in vascular plants. Average of three laboratory hours per week. Prerequisite: 14.105. Fall, even years.

14.441 (441) PLANT PATHOLOGY (4) A study of plant diseases, their symptoms, causal agents, etiology, epidemiology, prevention, and control. Average of three laboratory hours per week. Prerequisite: 14.105. Fall, odd years.

14.456 (457) ORNITHOLOGY (4) Lecture, laboratory and field course in bird identification, structure, behavior, ecology, and general economic relationships. Emphasis is on birds of the Baltimore area. A banding station is operated in conjunction with the course. Occasional field trips. Average of two laboratory hours per week. Spring, even years.

14.458 (459) MAMMALOGY (4) The evolution, comparative morphology, systematics, and distribution of mammals. Representative life histories are considered. Average of two laboratory hours per week. Prerequisite: permission of instructor. Spring, odd years.

14.461 (461) ENTOMOLOGY (3) Laboratory and field course in insects. Recognition of the more common orders, and a study of their structure, behavior, ecology, economic importance, and control. Average of two laboratory hours per week. Fall, even years.

14.463 (463) ANIMAL EMBRYOLOGY (4) Developmental anatomy and the underlying principles involved in development. This last area will be approached from an experimental base. Average of three laboratory hours per week. Prerequisite: 14.109. Fall, odd years.

14.465 (465) ANIMAL PHYSIOLOGY (4) Functioning of animal organ systems, with emphasis on the vertebrate body. Average of three laboratory hours per week. Prerequisites: 14.109, CHEM 22.101, 22.102. Fall, odd years.

14.481 (491) DIRECTED READING IN BIOLOGY (1-3) Independent reading in an area selected by the student in consultation with the instructor. Prerequisites: a minimum of 10 hours in biology and consent of instructor. Each semester.

14.485, 14.486 (485) (486) SEMINAR: SPECIAL TOPICS IN BIOLOGY (1, 1) Study and discussion of topics in a specialized area to be selected by instructor. Areas will vary from semester to semester. Prerequisites: a minimum of 10 semester hours in biology and consent of instructor. Each semester.

14.491 (496) INDEPENDENT RESEARCH IN BIOLOGY (2-3) Independent investigation of a problem under the supervision of a staff member culminating in a written presentation. Prerequisite: a minimum of 15 semester hours in biology and consent of instructor. Each semester.

14.495 (495) COURSE RESEARCH (1) By invitation or with the consent of the instructor. Research related to a specific course successfully completed by the student. Each semester.

14.498 (497) HONORS RESEARCH IN BIOLOGY (2) Individual research of an extensive nature under the direction of a staff member, culminating in an honors thesis. Credit for 14.498 not awarded until 14.499 is successfully completed. Prerequisites: open only to advanced honors candidates and by consent of instructor. Each semester.

14.499 (498) SENIOR THESIS IN BIOLOGY (2) Writing of an honors thesis based on individual research done under the direction of a staff member. Prerequisites: 14.498, open only to advanced honors candidates and by consent of instructor. Each semester.

Graduate Division

14.501 (501) CURRENT TOPICS IN BIOLOGY (3) Discussion of current topics in a specific area of biology. The area will vary each semester; therefore, this course may be taken more than once. Prerequisites: a suitable background in the area emphasized and consent of department. Evening and summer programs.

14.503 (503) ADVANCED CONCEPTS IN BIOLOGY (3) An advanced study of current literature pertaining to significant concepts and principles in biology. Primarily for students planning a concentration in biology. Prerequisite: a basic background in biology or consent of department. Evening and summer programs.

14.505 PROBLEMS IN BIOLOGY (1-3) Laboratory or literature research on a particular problem of interest to the student that does not pertain to his thesis. Credits to be arranged by consultation with the instructor. Evening and summer programs.

14.697, 698 (...) GRADUATE SEMINAR (1,1) Student reports and discussions dealing with biological research. The subject matter will vary each semester. Students are required to enroll for two semesters. Evening and summer programs.

14.699 THESIS (6-9) An original investigation to be pursued under the direction of one or more faculty members. Credit granted only after thesis has been accepted by the student's thesis committee. Evening and summer programs.

SCIENCE EDUCATION COURSES (SCIE)

The following courses are staffed by the Department of Biological Sciences and Physical Sciences and are offered in cooperation with the Education Department. Descriptions of these courses are included under Education Department listings.

EDUC 26.341 (333) EARLY CHILDHOOD EDUCATION PROFESSIONAL BLOCK I — SCIENCE

EDUC 27.398 (390) STUDENT TEACHING IN THE SECONDARY SCHOOL — BIOLOGY

EDUC 27.398 (390) STUDENT TEACHING IN THE SECONDARY SCHOOL — SCIENCE

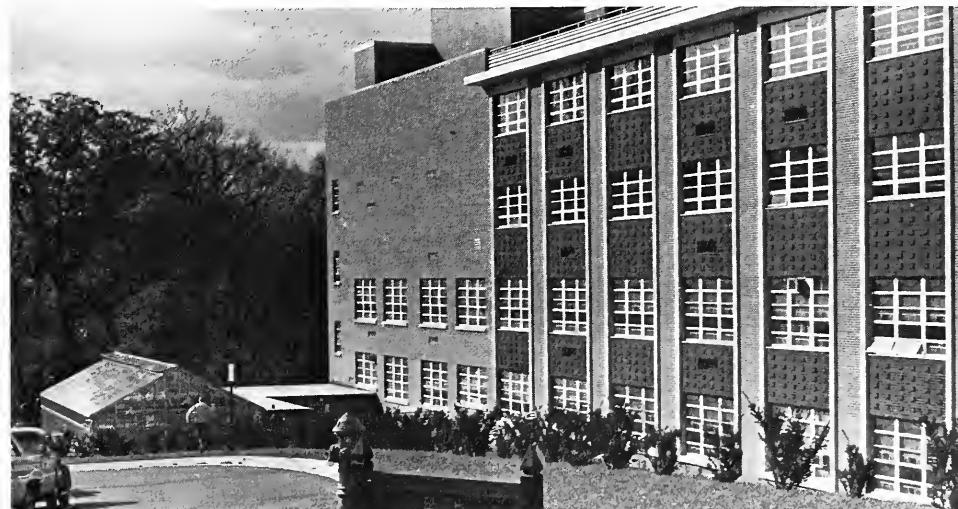
SCIE 76.371 (335) TEACHING SCIENCE IN EARLY CHILDHOOD

SCIE 76.379 (383) TEACHING SCIENCE IN THE SECONDARY SCHOOL

SCIE 76.488 (SUMMERS) AEROSPACE EDUCATION WORKSHOP

SCIE 76.585 (509) SEMINAR IN ELEMENTARY SCHOOL SCIENCE

BIOL 14.303 (...) LIFE SCIENCE IN THE ELEMENTARY SCHOOL



BUSINESS ADMINISTRATION

Assistant Professors: FRIJTERS (Acting Chairman), GIBNEY

Instructors: HAMPTON, STOKES

The Business Administration curriculum provides training for a career in business or government as well as preparation for graduate study in business fields. In addition to learning business subjects, those planning a career in business should acquire an understanding of economic, political, and social conditions in society. They should also develop abilities to write and speak effectively and appreciate the increasing application of mathematics to business. The importance of these attainments is reflected in the requirements for the major as well as in the suggested electives.

Requirements for the Major

Thirty credit hours of business courses are required, including BUAD 16.101, 16.102, 16.201, and at least 2 hours of upper-level BUAD courses. Also included in this 30 hours is Math 50.231 (Basic Statistics) or Math 50.331 and 50.332.

The following courses are also required for the business major, but do not count toward the 30 credits: Econ 24.101, 24.102, and 24.323, and Math 50.115 (or Math 111 or equivalent).

Credit toward the 30 hours will be given for any two of the following electives outside of the business department:

Econ 24.309	Intermed. Price Theory	Posc 68.375	Public Administration
Econ 24.381	Labor Economics	Mcom 53.215	Bus. & Prof. Speech
Econ 24.407	Bus. Cycles & Forecasting	Math 50.209	Mathematics of Finance

In addition, credit toward the business major will be given for approved courses taken at other schools. In particular, students may take courses in advanced accounting, advertising, and retailing at Morgan State College.

Transfer students with business administration credits earned elsewhere must complete, with a C or better, at least 15 hours of business credits at Towson State College in order to qualify for the business major.

Requirements for the Minor

The minor requirements are 24 hours of business courses, including BUAD 16.101, 16.102, 16.201 and at least 9 hours of upper-level BUAD courses. Courses outside the business department which count toward the major will also be accepted toward the minor. The business minor also requires Econ 24.101 and 24.102 and Math 50.115 (or 111) though these do not count toward the 24 hours.

Additional Electives recommended to Business Majors

Econ 24.327	International Economics	Math 50.271, 272	Calculus
Posc 68.103	Amer. National Gov.	Math 50.337	Computer Programming
Posc 68.207	State Government		
Posc 68.305	Urban Gov. & Politics	Mcom 53.256	Feature Writing
Geog 34.391	Urban Geography	Mcom 53.353	Publicity & Pub. Relations
Soci 80.101	Intro. to Sociology		
Soci 80.344	Urban Sociology	Mcom 53.385	Mass Media in Modern Society
Psyc 70.104	Applied Psychology		
Psyc 70.322	Social Psychology		

Suggested areas for a minor to combine with a major in business administration are: economics, political science, mathematics, speech (public address), and psychology (for those interested in personnel work).

BUSINESS ADMINISTRATION COURSES (BUAD)

Lower Division — Undergraduate

16.101-102 (201-202) ACCOUNTING PRINCIPLES (3, 3) Fundamentals of accounting, as applied to proprietorships, partnerships, and corporations. The recording process; construction, interpretation, and managements' use of financial statements.

16.201 (205) INTRODUCTION TO BUSINESS MANAGEMENT (3) This course is concerned with the problems of organization dynamics and behavior of people, within and outside the business, with which management must deal in attaining the objectives of the enterprise.

Upper Division — Undergraduate and Graduate

16.301 (302) MARKETING MANAGEMENT (3) An analytical approach to the study of marketing problems of business firms. Attention is focused on the influence of the marketplace, the industry structure, and the role of government. Prerequisite: 16.205.

16.303 (303) FINANCIAL MANAGEMENT (3) An analytical approach to the study of financial problems of business concerns. Instruments and institutions significant for financial management are studied. Prerequisites: 16.202, 16.205.

16.305 (304) BUSINESS LAW I (3) The function of the law with particular attention to contracts, agency, sales, commercial paper, personal property, and real property.

16.306 BUSINESS LAW II (3) The law of partnerships, corporations, estates, bankruptcy, and of government relationships with business. Prerequisite: 16.305 or may be taken simultaneously with 16.305.

16.307 (307) COST ACCOUNTING (3) The three widely used systems of cost accounting: process costs, job order costs, and standard costs. Prerequisite: 16.102.

16.309-310 INTERMEDIATE ACCOUNTING (3, 3) Preparation and analysis of financial statements. Accounting theory. Valuation of working capital, noncurrent assets and liabilities, revenue and expenses. Prerequisite: 16.102.

16.325 (325) PERSONNEL MANAGEMENT (3) Recruiting, selecting, utilizing, and maintaining an effective and satisfied work force. Prerequisite: 16.201.

16.361 (361) PRINCIPLES OF INVESTMENT AND SECURITY ANALYSIS (3) The valuation of stocks and bonds: safety, income, and marketability. Analysis of financial statements. Portfolio management. Prerequisites: 16.101 and 16.201.

16.363 INTRODUCTION TO INTERNATIONAL BUSINESS (3) International payments, importing and exporting, foreign investment, market entry, foreign taxation, international business law. No prerequisites. Fall.

16.401-402 (401-402) CONTEMPORARY BUSINESS PROBLEMS (6) A seminar course designed to challenge the student's ability to form soundly developed business decisions. The emphasis is on relating the appropriate marketing, financial and production information available to management. Prerequisite: nine hours of upper level BUAD credits.

16.410 (409) ADMINISTRATIVE ANALYSIS (3) Techniques of increasing management efficiency, including organization analysis, systems analysis, time and motion study, automatic data processing, and feasibility studies. Prerequisites: 16.102 and 16.201.



ECONOMICS AND POLITICAL SCIENCE

Professors: COLEMAN (Chairman), MERANI, SANBORN

Associate Professor: BELGRAD

Assistant Professors: EHRLICH, EKPO, GIBNEY, PAUL, SHIN, WEINTRAUB

Instructor: REID

The respective areas of economics and political science are designed to achieve the following objectives: to aid the student to be a better adjusted and more effective citizen, to provide preparation for admission into graduate and professional schools, as well as to give background training for careers in teaching, civil and international administration, law, public relations, business and research.

ECONOMICS

Requirements for the Major

Thirty credit hours will be required as a minimum for the major in economics, including eighteen hours of required courses and twelve hours of electives. The required courses are 24.202, 24.203, 24.324, 24.310, 24.335, and Mathematics 50.231.

Requirements for the Minor

Twenty-four credit hours are required as a minimum for the minor in economics, including nine hours of required courses and fifteen hours of electives. The required courses are 24.202, 24.203, and 24.324.

Attention is also called to certain courses in other disciplines which can in part be used to fulfill the requirements for a major or a minor in economics. The following courses can be used to satisfy these requirements:

Geography 34.231 Economic Geography

History 40.417, 418 Economic History of Europe

History 40.365, 366 Economic History of the United States

POLITICAL SCIENCE*Requirements for the Major*

Thirty credit hours are required as a minimum for the major in political science, including nine hours of required courses and twenty-one hours of electives. Six hours of lower division courses are required. These shall consist of either 68.101 and 68.102, or 68.103 and 68.207. Three hours in a seminar course are also required. This requirement can be satisfied by taking any one of the following: 68.481, 68.487, or 68.491.

Normally a student who transfers to Towson State College with senior standing will be expected to complete fifteen hours of political science here to satisfy the requirements for a major; those who transfer below senior standing will be expected to complete twenty-one hours.

Requirements for the Minor

Twenty-four hours are required as a minimum for the minor in political science, including six hours of required courses and eighteen hours of electives. The six-hour requirements can be fulfilled by taking either 68.101 and 68.103, or 68.103 and 68.207.

Attention is called to courses in other disciplines which can in part be used to fulfill the requirements for a major or a minor. A maximum of six hours can be taken in the following courses to satisfy the requirements for a major or a minor in political science:

Economics 24.327	International Economics
Geography 34.381	Political Geography
Economics 24.381	Labor Economics and Labor Relations
Economics 24.337	Public Finance
History 40.370	Diplomatic History of the United States
History 40.367, 368	Constitutional History of the United States

ECONOMICS COURSES (ECON)*Lower Division — Undergraduate*

24.101 (202) ECONOMIC PRINCIPLES AND PROBLEMS (3) How private enterprise determines what is produced, prices, wages, profits. Supply and demand. Competition and monopoly. Labor unions, income distribution. Farm policy. The role of the government in our economy.

24.102 (203) ECONOMIC PRINCIPLES AND PROBLEMS (3) Inflation and unemployment — causes and remedies. Money and banking. Government spending and taxation. International trade. Prerequisite: 24.202.

Upper Division — Undergraduate Only

24.309 (310) INTERMEDIATE PRICE THEORY (3) Determination of prices, output, wages, resource allocation. Theory of the firm. Theory of competition, monopolistic competition, oligopoly, and monopoly. Prerequisite: 24.203.

24.311 (312) GOVERNMENT AND ECONOMIC LIFE (3) The rationale of government control and regulation of private enterprise. Maintenance of competition. Antitrust policy. Public utility regulation. Transportation policy. Subsidies. Government armed and operated enterprise. Prerequisite: 24.203.

24.315 (315) ECONOMIC DEVELOPMENT (3) Theory of economic growth. Problems and programs relating to underdeveloped countries. Prerequisite: 24.203.

24.323 (324) MONEY AND BANKING (3) Organization and function of the money, credit and banking system of the United States; banking institutions, Federal Reserve System; the relation of money and credit to prices; foreign exchange. Prerequisite: 24.203.

24.327 (327) INTERNATIONAL ECONOMICS (3) International trade. Tariffs and other restrictions. The principle of comparative advantage. The International Bank, the International Monetary Fund, and other cooperative arrangements. Prerequisite: 24.203.

24.331 (332) COMPARATIVE ECONOMIC SYSTEMS (3) Contemporary economic systems with emphasis on methods of social control. Capitalism, socialism, communism. Economic planning. Prerequisite: 24.203.

24.335 (335) MACROECONOMIC THEORY (3) The overall level of output, prices, employment, interest rates. Keynesian economics. Prerequisite: 24.203.

24.337 (337) PUBLIC FINANCE (3) Principles of taxation, government expenditure and public debt; relationship of fiscal policy to income and growth. Prerequisite: 24.203.

24.381 (382) LABOR ECONOMICS AND LABOR RELATIONS (3) The determination of wages. Labor unions: history, structure, activities, effects. Government labor policy. Prerequisite: 24.202.

24.401 (404) HISTORY OF ECONOMIC THOUGHT (3) Development of economic theory; eighteenth and nineteenth century classical schools. Modern economic literature on price, investment and employment. Prerequisite: 24.203.

24.407 (407) BUSINESS CYCLES AND FORECASTING (3) Changes in levels of income and output, tools and techniques for forecasting the future state of economic activities, and public proposals for controlling economic fluctuations. Prerequisites: 24.202, 24.203, 24.324.

Upper Division — Undergraduate and Graduate

24.485 (481) PROSEMINAR ON ECONOMIC ISSUES (3) Research and writing of papers on an economic issue selected by the instructor. Prerequisites: 24.324, 24.335.

24.585 (489) WORKSHOP ON ECONOMIC EDUCATION (3) Designed to help teachers and school administrators gain a better understanding of the economic workings of the society in which we live. Prerequisite: consent of the instructor.

POLITICAL SCIENCE COURSES (POSC)

Lower Division — Undergraduate

68.101 (201) INTRODUCTION TO POLITICAL SCIENCE (3) The origins of modern governments. The nature of constitutions and constitutions and constitutionalism. A definition and interpretation of politics, Prerequisite: sophomore standing.

68.103 (206) AMERICAN NATIONAL GOVERNMENT (3) Structure and functions of the government of the United States and the problems involved in the extension of the scope of democratic government in our contemporary life.

68.207 (207) STATE GOVERNMENT (3) Historical background, state constitutions, and the legislative, executive and judicial branches of government. Problems of state administration and federal-state relations. Prerequisite: 68.206.

Upper Division — Undergraduate Only

68.355 (355) THE LATIN AMERICAN POLICY OF THE UNITED STATES (2, 3) Diplomatic and cultural relations between the United States and Latin America. The Pan-American Movement, Implementation of the Monroe Doctrine, and the Advent of the Good Neighbor Policy. Prerequisites: History 40.145, 146.

68.351 (357) THE GOVERNMENT AND POLITICS OF LATIN AMERICA (3) Presents both the formal governmental structure of Latin American nations and the basic factors which influence their political life. Prerequisites: History 40.121 and 40.122.

Upper Division — Undergraduate and Graduate

68.303 (303) THEORY OF INTERNATIONAL POLITICS (3) The theories of mutual relations of states. Elements of national power; international politics as a struggle for power. Restraints upon the struggle for power. Prerequisite: History 40.122.

68.305 (305) URBAN GOVERNMENT AND POLITICS (3) The political history of American cities from the eighteenth century through the recent reform movement. City charters, home rule, types of executives, political machines. The metropolitan area. Prerequisite: 68.206 or 68.201

68.307 (315) CONTEMPORARY INTERNATIONAL POLITICS (3) An examination of the conduct of international relations by the Western, the Communist, and the non-aligned blocs in the Post-World War period. Prerequisite: 68.303.

68.337 (338) COMPARATIVE GOVERNMENT OF FOREIGN POWERS: THE WESTERN WORLD (3) Constitutional and legal processes of England, France, Italy, and Germany. Some attention given to the small social-democratic states of Europe. Prerequisites: History 40.121, 40.122.

68.338 (339) COMPARATIVE GOVERNMENT OF FOREIGN POWERS: RUSSIA AND THE EAST (3) Constitutional and legal processes of Russia, Japan, China and other Eastern powers. Prerequisites: History 40.121, 40.122.

68.375 (376) PUBLIC ADMINISTRATION (3) Administration as a central element of contemporary society, with special reference to the problems of government organization, control, personnel, finance, and public relations. Prerequisite: 68.206.

68.401 (301) INTRODUCTION TO LAW (3) The legal processes in the United States. This course is designed primarily for the liberal arts student. Prerequisites: sophomore standing, and one course of introductory political science.

68.417 (417) AMERICAN POLITICAL PARTIES (2) Origin and development of the American two-party system. The activities of pressure groups and organizations, and their effects upon the party system. Prerequisite: 68.206, or History 40.145, 146.

68.418 (418) CONSTITUTIONAL LAW (3) A study of the constitution of the United States based on leading judicial decisions interpreting the constitution and statutes from 1789 to the present. Prerequisite: 68.206.

68.427 (426) POLITICAL THEORY (3) Political thought in the West from the Greeks to the end of the sixteenth century. Prerequisite: History 40.121, 122 or consent of instructor.

68.428 (427) POLITICAL THEORY (3) Political philosophers and their writings since the sixteenth century. Attention given to the conflict of ideologies in the twentieth century. Prerequisite: History 40.121, 122 or consent of instructor.

68.432 (432) UNITED STATES-SOVIET RELATIONS (3) Diplomatic, cultural, and economic relations between the U.S.S.R. and the U.S. Emphasis on the period since 1933 with a careful study of the effects of the Second World War upon the balance of power. Prerequisites: History 40.121, 122, 145, and 146.

68.435 (435) AFRICA IN WORLD POLITICS (3) The role of African nations in the nuclear age, and their efforts to achieve unity. Prerequisite: History 40.122, or consent of instructor.

68.439 (440) UNITED STATES FOREIGN POLICY IN SOUTHEAST ASIA (3) American foreign policy in Southeast Asia in the Post World War II period. Prerequisites: 68.303, and History 40.145, 146.



68.441 (441) CONTEMPORARY UNITED STATES-WESTERN EUROPEAN RELATIONS (3) Emphasis will be on NATO, the European Economic Community, and the Anglo-American efforts to create an Atlantic partnership between Europe and the United States. Prerequisites: History 40.264 and History 40.146.

68.445 UNITED STATES FOREIGN POLICY IN SOUTH ASIA (3) A discussion of American foreign policy in South Asia mainly since 1945. Emphasis will be on India and Pakistan. Prerequisite: 68.303, History 40.312, or consent of instructor.

68.455-456 (455-456) INTERNATIONAL LAW AND ORGANIZATION (3, 3) An examination of the theories and the development of international law up to the present. The character of the modern state system, the role of international organizations, and international law and resort to force. Prerequisites: 68.303, and History 40.122.

68.481 (481) INDEPENDENT STUDY (3) Individual and supervised study in selected areas of political science. Prerequisite: Eighteen hours of political science, or consent of the instructor.

68.487 (482) SEMINAR IN POLITICAL SCIENCE (3) Various methods and techniques of research in political science, culminating in the preparation of a seminar paper. Prerequisite: eighteen semester hours in political science, or consent of instructor.

68.491 (490) SEMINAR IN CONTEMPORARY UNITED STATES FOREIGN POLICY (3) An examination of the nature, basis, and instruments of American foreign policy in the contemporary age. The formulation, control, and execution of American foreign policy will also be noted. Prerequisites: 68.303, and History 40.145, 146.

EDUCATION

Professors: BROYLES, BURRIER, DUMAS, ELY-FLICKINGER, FITZGERALD, GUTKOSKA (*Director of Reading*), HAUSERMAN (*Director of Teacher Education*), HEAGNEY, KJER (*Chairman, Early Childhood Education*), LINDNER, SCHMID (*Chairman, Elementary Education*), SPRAGUE, WESLEY, WILLIAMSON (*Director of Laboratory Experiences*), WILLIS

Associate Professors: ABENDROTH, BELLows, BENTON, BRAMBLETT, BRANDWINE, BRODBELT, EPSTEIN, HANSON, HOLDEN, JESSUP (*Chairman, Secondary and Foundations Education, Director of Field Services and Educational Research*), KILEY, KIMSEY, TRITCH, VAN NORMAN (*Director of Professional Programs*), VELIE

Assistant Professors: BINKO, BOND, BOYD, COHEN, COLIMORE, COX, FINK, FLAD, HUGHES, KARFGIN, GARNER, KING, LINDSAY, NICHOLAS, PATTEN, POUR, RAY, SEAMAN, TAYLOR, VELDER, WATERS

Instructors: BEINER, COHN, OLSON, O'NEILL, MCDONALD, THOMPSON

Visiting Lecturers: DONELSON, LYONS

The teacher education program is designed to help the student mature in the varied understandings and competencies needed by the beginning teacher. Building upon the foundation of a sound general education, the student is guided toward an understanding of the child, the school, and the educative process. Courses in theory are carefully interwoven with laboratory experiences in the public schools to provide continuing practical experiences throughout the student's professional program. All aspects of the programs have as their major objective the development of teachers who are broadly prepared individuals, who work well with children, and who are ready and able to take intelligent action on current educational issues.

Students who plan to major in education should file an application to enter a professional program in the Education Department Office no later than the second semester of the sophomore year at Towson. To be eligible a student must be in good standing, have a cumulative average of 2.00+ and must demonstrate outstanding personal qualifications for working with children. The application forms must be maintained with additional information and

pertinent changes as necessary. All teacher education students must apply for student teaching on a form provided by the Director of Laboratory Experiences during the semester preceding student teaching.

EARLY CHILDHOOD EDUCATION PROGRAM

Undergraduate Program

The early childhood education major is designed for students who have an interest in teaching the young child, ages three through eight. It is built on the premise that special capabilities and understandings are necessary to teach successfully in the preschool and primary grades. There is a critical demand for specialization by men and women in early childhood education.

The major in early childhood education leads to State Certification to teach in nursery school, kindergarten, and primary grades. It also prepares students for positions in other programs for young children such as day care centers.

To meet both the College and Maryland State Certification requirements in general education the student must complete the following courses: Art 4 hours, including 12.105 (12.203); English 12 hours, including 30.102 (30.102); Music 54.101 (54.101) and 54.233 (54.233); Spanish 87.105 (87.205); Biology 14.101 (14.103); Physical Science 64.101 (64.200); Mathematics 50.204 (50.204) and 50.205 (50.205); Psychology 70.101 (70.101) and 70.205 (70.205); History 40.263 (40.121) and 40.264 (40.122) or 40.145 (40.221) and 40.146 (40.222); Geography 34.101 (34.103) or 34.102 (34.104); Sociology 80.101 (80.201) and 80.207 (80.305); Health 38.101 (38.205); Physical Education 2 hours. In addition, the student must elect courses in arts and sciences for a total of 80 hours of academic work.

The required professional education courses in early childhood education (in sequence) are: Education 27.101 (26.101); Psychology 70.203 (70.203); Education 26.341 (26.323); 26.342 (26.324); Mathematics 50.321 (50.321); Education 26.343 (26.325); Science Education 76.371 (76.371); Education 26.351 (26.395) and 26.352 (26.396); Education 27.401 (26.410); approved electives to total 35 hours in professional education.

Deviations from the program pattern for early childhood education majors are permitted only with the consent of the Chairman of Early Childhood Education. In addition to the major in early childhood education, a student, by using his elective hours carefully, may develop a major or a minor in a subject matter area.

GRADUATE PROGRAM

For more detailed information regarding the Master of Education in Early Childhood Education see the Graduate Studies Bulletin.

EARLY CHILDHOOD EDUCATION COURSES (EDUC)

Upper Division — Undergraduate Only

Professional Block I

26.341 (323, 333) THE RELATED ARTS AND SCIENCES OF THE ARTS (6) Interdepartmental instruction by specialists in art, music, physical education and science with emphasis on the personal development of the becoming teacher and coordinated by a faculty member from Early Childhood Education program. Classroom participation.

Professional Block II

26.342 (324, 334) CURRICULUM ANALYSIS AND METHODS OF INSTRUCTION (3) Emphasis on objectives, materials, and methods in teaching reading and the other language arts, and social living. Extended participation in public school classrooms is an integral part of the course.

50.321 (50.321) (334) TEACHING MATHEMATICS IN EARLY CHILDHOOD EDUCATION (2) (Course description will be found under the Mathematics Department listings.)

Professional Block III

26.343 (325, 335) CURRICULUM CONCEPTS IN EARLY CHILDHOOD (2) Parallels student teaching and is concerned with classroom problems encountered in student teaching. A specialist in reading assists block coordinator.

26.351, 352 (390, 395, 396) STUDENT TEACHING IN EARLY CHILDHOOD (10) Assignment in nursery school, kindergarten and primary grades classroom under expert guidance. Two terms of 8 weeks on different age levels, four consecutive days weekly (concurrent with Block III one day weekly).

76.371 (76.371) (335) TEACHING SCIENCE IN EARLY CHILDHOOD (1) Culmination of science emphasis in professional Blocks I and II.

**ALTERNATE MAJOR IN EARLY CHILDHOOD EDUCATION —
THE EVENING COLLEGE**

As a service to teachers who wish to pursue work toward a degree in early childhood education while they are on their teaching assignments and to other workers in various programs for young children, the Evening College offers an alternate program for the preparation of nursery school, kindergarten, day care center, and primary teachers which will enable them to major in early childhood education. See Evening College Bulletin for further information.

ADDITIONAL COURSES IN EARLY CHILDHOOD EDUCATION

Lower Division — Undergraduate

26.101 (211, 201) INTRODUCTION TO NURSERY, KINDERGARTEN EDUCATION: THE CHILD (3) Introductory survey of the developing child of nursery school, pre-kindergarten and kindergarten years. Designed for teachers of limited classroom experience. Prerequisite: approval of Department of Education.

26.102 (215, 230) THE YOUNG CHILD AND HIS CURRICULUM IN NURSERY SCHOOL AND KINDERGARTEN (3) The developing child and the curriculum influences in early school years. Designed for beginning teachers or teachers with limited experience. Prerequisite: 26.101 or approval of Department of Education.

26.121 (223, 231) LABORATORY EXPERIENCES IN NURSERY SCHOOL AND KINDERGARTEN (3) Practical application of educational theory through observation of children in classroom situations. Concurrent with 26.102. Summers only. Prerequisite: approval of Department of Education.

Upper Division — Undergraduate Only

26.301 (321) MATERIALS AND EXPERIENCES FOR THE YOUNG CHILD: AGES 3-8 (3) Stimulating the intellectual, social and emotional development of children (ages 3-8) through the use of varied instructional materials and activities. Prerequisite: Educ. 26.101 or 26.102 or approval of Department of Education.

26.355 (495, 403) DIFFERENTIATED STUDENT TEACHING IN EARLY CHILDHOOD EDUCATION (2-8) Student teaching experiences in addition to those in 26.351, 352 or student teaching in special subject areas according to needs and interests of the student. Prerequisite: approval of the Department of Education.

Upper Division — Undergraduate and Graduate

26.381 (421, 422) PROBLEMS IN EARLY CHILDHOOD EDUCATION (3) Research findings used as a basis for program planning in nursery school, kindergarten and primary grades; current trends and issues are considered. Prerequisite: student teaching and/or teaching experience in preschool or primary grades; junior standing; approval of Department of Education.

26.391 (423) LABORATORY EXPERIENCES IN EARLY CHILDHOOD (3) Classroom experiences with children in preschool and primary grades in a variety of teaching-learning situations. Analysis of observations in light of current research. Concurrent with 26.381. Summers only. Prerequisites: junior standing and approval of Department of Education.

Graduate Division

26.507 (551) HOME, SCHOOL, COMMUNITY (3) The interaction between home and school in educational programs for young children; survey and evaluation of various techniques of conferencing and working with parents; study of various agencies contributing to the well-being of young children at home and at school. Prerequisites: A course in Sociology and approval of the Department of Education.

26.509 (552) GROWTH AND DEVELOPMENT OF YOUNG CHILDREN (3) Study of findings of current research in growth and development of young children; methods of studying and evaluating behavior; implications of case study data for curriculum improvement. Prerequisites: Psych. 70.501 (501) and approval of the Department of Education.

26.521 (550) LANGUAGE DEVELOPMENT AND READING IN EARLY CHILDHOOD EDUCATION (3) Emphasis on contemporary issues; advanced interpretative and critical evaluations of research in language development and reading instruction in light of basic needs, developmental levels, and individual differences in young children. Prerequisites: Undergraduate course in reading and approval of the Department of Education.

26.553 (553) PERCEPTUAL AND COGNITIVE DEVELOPMENT OF YOUNG CHILDREN (3) Survey of significant research affecting the theory and programs of education for children ages three to eight years. Prerequisites: Psych (501) and/or Educ. 26.509 and approval of the Department of Education.

26.573 (530) SEMINAR IN EARLY CHILDHOOD EDUCATION (3) Seminar approach to current practices and trends in curriculum, materials, methods, and organization of educational programs for children ages three through eight years. A seminar paper is required. Prerequisite: Nine hours of graduate work in early childhood education.

26.599 MASTERS THESIS IN EARLY CHILDHOOD EDUCATION.

ELEMENTARY EDUCATION PROGRAM

Undergraduate Program

The major in elementary education leads to certification to teach grades 1 through 6, grades 1 through 8 in the middle schools organization, and grade 9 provided content requirements for the secondary certification are met. The program is designed to integrate classroom and laboratory experiences in such ways as to prepare students for beginning teaching in public schools.

In meeting the general course requirements and certification requirements the student must complete the following:

English: 12 semester hours including 30.102; Social Sciences: 15 semester hours including Geography 34.102, 9 semester hours of History electives, and 3 elective hours of Economics, Political Science, or Sociology; Psychology: 70.101; Science: 14 semester hours including Physical Science 64.200, Biological Science 14.101, Earth-Space Science in Childhood Education 64.303 and Life Science in Elementary Education 14.303; Mathematic: 50.204 and 50.205; Art elective 2 semester hours; Music 54.233; Physical Education 2 semester hours; Health 38.101; Speech Drama or Philosophy elective 2 or 3 semester hours; plus other elective courses to make a total of at least 80 semester hours in academic content courses.

The Elementary Education Major also requires 36 hours of courses in professional education. They are taken in the following sequence:

EDFS 27.101 (26.101), PSYC 70.203, PHED 60.201 and 202,* EDUC 26.461 (26.361) concurrently with MATH 50.323, BIOL 14.303 or PHSC 64.303, ART 12.371,** MUSIC 54.307, PHED 60.324,** ADUC 26.462 (26.362) concurrently with EDUC 26.497 (26.397), EDPM 28.315 (26.385), EDFS 27.401 (26.410).

Professional education electives may be added to these toward the accumulation of the 128 semester hours required for graduation.

A concentration of related courses or a major in arts or sciences is desirable for the student in elementary education.

Deviations from the program pattern for elementary majors (i.e. in content or sequence of professional education courses) are permitted only with the written consent of the Chairman of Elementary Education.

*Physical Education (60.201) and (202) are required if the student wishes to take Physical Education (60.324) as part of his professional preparation.

**Students in elementary education will take two of the three methods courses in Art, Music or Physical Education for which they must have the prerequisite requirements. The third course may be taken as an elective on the same basis.

ELEMENTARY EDUCATION COURSES (EDUC)

Two Year Experimental Courses

26.001 CREATIVE EXPRESSION (6) Experiences in planning and teaching an integrated and creative program of art, music and physical education activities at the elementary level. Fall 1970.

Upper Division — Undergraduate Only

12.371 (12.371) ART AND THE CHILD (2-3) Major considerations of art education appropriate to the work of the elementary teacher; experiences in planning and teaching art.

12.475 (12.375) TEACHING ART IN THE ELEMENTARY SCHOOL (2) Concurrent course with 396, Art in the Secondary School. For course description see 396. Open only to Art Education Majors. Prerequisite: Approval of Art Department.

26.421 (26.353) TEACHING LANGUAGE ARTS IN THE ELEMENTARY SCHOOL (2) Language needs and abilities of children. Development of effective language skills with emphasis on reading taken with 26.362 (26.360).

26.423 (26.354) TEACHING READING IN THE ELEMENTARY SCHOOL (2) Introduction to reading in the elementary school. A survey of varied approaches with emphasis on skills development.

26.461 (26.361) ELEMENTARY CURRICULUM I (4) Foundation of reading instruction and an overview of elementary schools including curriculum, organization, planning, evaluation, teacher characteristics, observation and participation in public schools. Prerequisite: Approval of Education Department.

26.462 (26.362) ELEMENTARY CURRICULUM II (6) Integration of language arts (spelling, writing, literature, listening, usage, vocabulary development), social studies (nature of groups, research units, history, economics, government, sociology) and advanced reading instruction. Prerequisite: Elementary Curriculum I and approval of Education Department.

26.497 (26.397) STUDENT TEACHING IN ELEMENTARY SCHOOL (10) Ten to twelve weeks, full time, in public school classrooms under the guidance of master teachers. Weekly conference with the college supervisor after school hours. Prerequisite: Approval of Education Department.

26.498 (26.497) DIFFERENTIATED STUDENT TEACHING-ELEMENTARY (2-8) Student teaching experiences in addition to those in 26.497 (26.397) or student teaching in special subject areas, according to needs and interests of the student. Prerequisite: Consent of the student's area director.

50.323 (50.323) TEACHING MATHEMATICS IN ELEMENTARY SCHOOL (2 or 3) Nature of instruction. Organization of units of instruction. Provisions for developing understandings. New programs and research findings. Techniques of evaluation. Required of all Elementary Education Majors. Prerequisite: 50.204 and 50.205.

54.307 (54.345) TEACHING MUSIC IN THE ELEMENTARY SCHOOLS (2) Acquaints students with music programs in the elementary school through lecture, class discussion, and practice with children. Prerequisite: 54.233.

60.324 (60.324) TEACHING PHYSICAL EDUCATION IN THE ELEMENTARY SCHOOL (2) Observation and participation at Lida Lee Tall School. Time is devoted to planning, preparation, and presentation. Prerequisite: PhEd. 101 or 102, and PhED 201 and 202.

76.375 (76.375) TEACHING SCIENCE IN THE ELEMENTARY SCHOOL (2) Significance of science for the elementary school child; its contribution toward his development; criteria for selecting science experiences for children.

78.375 TEACHING SOCIAL STUDIES IN THE ELEMENTARY SCHOOL (3) Locating, organizing, synthesizing, and interpreting fundamental social information.

84.375 (84.375) SPEECH IN ELEMENTARY SCHOOL (2) A study of speech needs of the school child and current methods and materials used by the classroom teacher in meeting needs.

Upper Division — Undergraduate and Graduate

26.417 (26.417) CHILDREN'S LITERATURE (3) Examination of children's books; study of content and form.

26.441 (26.441) CURRICULUM DEVELOPMENT IN THE ELEMENTARY SCHOOL (2) The child and his curriculum. The teacher's role in curriculum as a process. Principles and philosophies of curriculum development. Objectives, practices, materials, and evaluation trends. Prerequisite: Educ 26.497.

26.425 (26.409) CORRECTIVE READING (2-6) The psychology of reading; methods, principles, techniques, and materials for the classroom teacher in meeting typical learning patterns. Experience in a laboratory center for the development of skill in analysis and correction of reading disabilities. Prerequisites: Educ 26.497 and 26.429 or 26.427, or consent of instructor.

26.427 (26.453) READING AND OTHER LANGUAGE ARTS IN THE ELEMENTARY SCHOOL—ADVANCED (2-3) Application of theory and research to the teaching of reading and the other language arts. Prerequisite: 26.423 (26.354).

26.429 (26.454) METHODS AND PRINCIPLES OF READING INSTRUCTION—ADVANCED (2-3) Principles involved in building a developmental reading program; prevention of reading difficulties; methods of remedial reading. Prerequisite: 26.423 (26.354).

54.407 (54.441) MUSIC IN ELEMENTARY SCHOOL—ADVANCED (3) Materials and procedures in a school music program including participation in planning and presentation of musical programs in the Lida Lee Tall School.

Graduate Division

26.616 (26.516) THE ADMINISTRATION OF THE ELEMENTARY SCHOOL (3) Analysis of principles of elementary school administration, the administrator's roles and responsibilities, human relations and personnel management, public relations, management of the school unit and curriculum. Prerequisite: Three years teaching experience, teacher certification and nine hours of graduate credit.

26.621 (26.517) READING DISABILITIES (3) Causes of reading disabilities; observation and interview procedures; standard and informal tests; report writing; materials and methods of instruction. Prerequisites: 26.421, or 26.423 or consent of instructor.

26.623 (26.541) METHODS AND MATERIALS IN TEACHING READING IN THE ELEMENTARY SCHOOL (3) Covers trends in methods, materials, and individualized reading designs essential to the organization and administration of a function reading program. Prerequisite: 26.421 or 26.423 or consent of instructor.

26.625 (26.583) CLINIC PRACTICUM IN READING (3) A clinical or laboratory experience. Students diagnose and treat reading disability cases under the supervision of the directors of the reading program. Prerequisites: 26.621 and 26.623.

26.627 (26.597) EVALUATION OF READING RESEARCH (3) The tools of research and experimentation. The emphasis will be on past and present research relevant to reading. Prerequisites: Course in Tests and Measurement or statistics and consent of instructor.

26.629 (26.571) SEMINAR IN READING (3) An advanced course to familiarize the student with interdisciplinary aspects of the reading process. The highlight of the course will be the team teaching aspect. Consultants such as psychologists, pediatricians, optometrists, guidance teachers, etc. will play an important role in his course. Prerequisites: 26.621 and 26.623.

26.665 (26.525) CURRICULUM DEVELOPMENT IN THE ELEMENTARY SCHOOL (3) History of curriculum development in the elementary school; basic considerations affecting curriculum development; patterns of organization; objectives, practices, and evaluation; problems in curriculum development. Prerequisite: Baccalaureate degree and consent of instructor.

26.675 (26.575) SEMINAR IN ELEMENTARY EDUCATION (3) Seminar approach to current practices and trends in elementary school curriculum, materials, methods, and organization. A seminar paper is required. Prerequisite: 9 hours of graduate work in education.

26.681 (26.581) SEMINAR IN ELEMENTARY SUPERVISION (3) Role of the supervisor; supervisory practices and techniques. Students may concentrate in areas related to their professional interests. Prerequisite: Nine hours of graduate work in the field of education.

26.699 MASTERS THESIS IN ELEMENTARY EDUCATION

GRADUATE PROGRAM

MASTER OF EDUCATION IN ELEMENTARY EDUCATION

For detailed information regarding the Master of Education in Elementary Education see the Bulletin of Graduate Studies.

MASTER OF EDUCATION IN READING

The Master of Education Degree Program in Reading is designed to offer experiences that will improve the teaching of reading at all levels from kindergarten through college. Specifically, the program seeks to offer courses in reading for teachers and administrators who are interested in improving their knowledge of reading and to prepare reading clinicians to teach developmental, corrective, and remedial reading. Furthermore, the program is designed to prepare reading specialists who will be capable of filling leadership roles in reading improvement programs in schools and clinics.

The Course Requirement for the Degree include 26.621, 26.623, 26.625 and 26.629 are listed above and detailed information regarding the program is given in the Bulletin of Graduate Studies.

SECONDARY EDUCATION PROGRAM

UNDERGRADUATE PROGRAM

The program of education for junior and senior high school teachers is designed to bring about a close integration between teaching methods and the practical experiences of observation and student teaching. After introductory courses in the nature of today's schools and their students, the prospective secondary teacher enters the student teaching semester. Methods, philosophy, techniques, and practice are combined to provide a thorough preparation for teaching. The student teaching semester is followed by a course in the socio-logical, philosophical, psychological, and historical foundations of education.

The required courses for all secondary education students, in addition to general course requirements are: AVCO 13.369 EDFS 27.101, EDFS 341 or EDPM 28.319 (for dual certification), Psyc 70.207 (prior to EDFS 27.341 or EDPM 28.319), a two-hour approved methods course, student teaching in major area, and EDFS 27.401.

All secondary education students (prospective secondary school teachers) must select a major in an area leading to certification by the Maryland State Department of Education. Students preparing to teach in secondary schools must meet the semester hour requirements of an academic major. The Education Department may require specific courses in the academic major. With regard to certification in the various areas, it is the responsibility of the student to see that he is meeting the State Requirements.

Students may prepare to teach in English, history, geography, social studies, mathematics, foreign language, biology, chemistry, physics, secondary school science, art, music, physical education, sociology, speech and dramatics, and health.

GRADUATE PROGRAM

For detailed information regarding the Master of Education in Secondary Education see the Bulletin of Graduate Studies.

SECONDARY EDUCATION COURSES (EDFS)

Upper Division – Undergraduate Only

12.479 (12.379) TEACHING ART IN THE SECONDARY SCHOOL (2-3) Theoretic basis of art education, the function of the art specialist, and instructional materials and skills. Concurrent course with 12.475. Open only to art majors. Prerequisite: Approval of Art Department.

27.341 (26.381) PRINCIPLES OF SECONDARY EDUCATION (3) Philosophy and purpose of secondary basic elements in planning instruction. Prerequisite: Junior standing and Psyc 70.207.

27.351 (26.365) TEACHING READING IN THE SECONDARY SCHOOL (2) Meets four hours per week for eight weeks. General developmental reading skills; identification, diagnosis, and remediation of reading problems; comprehension, vocabulary building, word-study skills.

27.353 TEACHING MODERN FOREIGN LANGUAGE IN THE SECONDARY SCHOOL (2) Aims and purposes of foreign language instruction; current curricular trends, including the importance of modern language teaching practices. Open to juniors or seniors, who plan to teach foreign language, with consent of instructor.

27.355 TEACHING SOCIAL STUDIES IN THE SECONDARY SCHOOL (2-3) Current curriculum trends; materials, methods, and activities, in the teaching of social studies, history, geography, and citizenship. Role of social studies in the core. Open only to students in the student teaching block.

27.357 TEACHING ENGLISH IN THE SECONDARY SCHOOL (2-3) Language Arts as taught in secondary schools. Open only to students in the student teaching block.

27.398 (26.398) STUDENT TEACHING IN SECONDARY SCHOOL (10) Practical experience in observation, participation, and student teaching in public school situation. Student Teaching is offered in the following subject areas:

27.398 (26.398) Art	(6)	27.398	Health	(8)
27.398 (26.398) English	(10)	27.398 (26.398) Music		(6)
27.398 (26.398) Speech and Dramatics	(10)	27.398 (26.398) Physical Education		(6)
27.398 (26.398) Mathematics	(10)	27.398 (26.398) Biology		(10)
27.398 (26.398) French	(10)	27.398 (26.398) Secondary School Science		(10)
27.398 (26.398) German	(10)	27.398 (26.398) Social Studies		(10)
		27.398 (26.398) Spanish		(10)

27.399 (26.498) DIFFERENTIATED STUDENT TEACHING — Secondary (2-8) Student teaching experiences in addition to those in 27.398 or student teaching in special subject areas, according to needs and interests of the student. Prerequisite: Consent of the student's area director.

50.423 (50.379) TEACHING MATHEMATICS IN THE SECONDARY SCHOOL (2) Aims and purposes of mathematics instruction; examination of courses of study and textbooks; study of conceptual approaches. Open only to students in the teaching block. Prerequisite: Math 50.353 and 50.361.

54.309 (54.392) TEACHING MUSIC IN THE SECONDARY SCHOOL (3) Current methods and materials used by the music specialist. Open only to students in the student teaching block.

61.325 (61.325) TEACHING PHYSICAL EDUCATION IN THE SECONDARY SCHOOL (2) Methods of teaching sports, track and field, stunts, combatives, rhythms, relays, and mass games. Open only to Physical Education majors and other interested students in the student teaching block.

76.379 (76.379) TEACHING SCIENCE IN THE SECONDARY SCHOOL (2) Selection of appropriate content, method and evaluation techniques, analysis of textbooks and resource materials. Open only to students in the student teaching block.

Upper Division — Undergraduate and Graduate

27.358 TEACHING COMPOSITION IN THE SECONDARY SCHOOL (3) This course includes: grammar vocabularies, motivational techniques, evaluation, student publications, varieties of purposes for writing, oral composition, laboratory experiences and individual problem analysis. Prerequisite: 27.357 or consent of instructor.

27.359 CONTEMPORARY MATERIALS FOR TEACHING ENGLISH IN SECONDARY SCHOOLS (2-3) Application of new materials designed for teaching the language arts in the secondary school including records, films, SRA materials, programmed learning, and television.

27.360 (26.365) TEACHING READING IN THE SECONDARY SCHOOL (3) Meets three hours per week for entire semester. General developmental reading skills; identification, diagnosis and remediation of reading problems; comprehension, vocabulary building, word-study skills.

27.441 (26.411) THE JUNIOR HIGH SCHOOL (3) Principles, purposes, functions, and characteristics of the Junior High School, with emphasis upon its organization and curriculum. Prerequisite: 27.341.

27.443 (26.415) THE MIDDLE SCHOOL (3) Functions and characteristics of the middle school; emphasis on nature of transcendent youth (ages 10-14), curriculum, and organizational patterns. Prerequisite: 26.342, or 26.461, or 27.341, or 28.319.

27.445 TEACHING IN THE MIDDLE SCHOOL (3) Instruction in the methods required for teaching in the middle school. An individualized program of instruction, readings, observations and teaching experiences will be planned for each student. Prerequisite: Teacher experience, student teaching, or concurrent with student teaching.

Graduate Division

27.641 (26.565) CURRICULUM DEVELOPMENT IN THE SECONDARY SCHOOL (3) Principles and philosophies of curriculum development; objectives, practices and evaluation trends; the teacher's role. Prerequisite: Consent of instructor.

27.643 (26.515) THE ADMINISTRATION OF THE SECONDARY SCHOOL (3) Analysis of principles of school administration, the administrator's roles and responsibilities, human relations and personnel management, public relations, management of the school unit and curriculum. Prerequisite: Three years teaching experience, teacher certification and nine hours of graduate credit.

27.679 SEMINAR IN SECONDARY SCHOOL SOCIAL STUDIES (3) A seminar approach to current research, trends, practices, issues, content, materials, and problems in the teaching of contemporary secondary school social studies. Individual reading and research will be pursued on selected topics culminating in a seminar paper. Prerequisite: Consent of instructor, or prior teaching experience in social studies.

27.681 (26.577) SEMINAR IN SECONDARY EDUCATION (3) Seminar approach to current practices and trends in secondary curriculum, materials, methods, and organization. A summer paper is required. Prerequisite: Nine hours of graduate work in the field of education.

27.683 (26.582) SEMINAR IN SECONDARY SUPERVISION (3) Role of the supervisor; supervisory practices and techniques. Students may concentrate in areas related to their professional interests. Prerequisite: Nine hours of graduate work in the field of education.

27.699 MASTERS THESIS IN SECONDARY EDUCATION

FOUNDATIONS COURSES (EDFS)

Lower Division – Undergraduate

27.101 (26.101) INTRODUCTION TO TEACHING (1) The role and scope of public education in American Democracy; the function of the teacher as a professional person; the nature of educational programs at all levels. Activities designed to help students make a choice of specialization.

Upper Division – Undergraduate and Graduate

27.301 (26.303) HISTORY OF EDUCATION (3) Major developments, personalities, and movements in the evolution of education.

27.401 (26.410) FOUNDATIONS OF EDUCATION (2-3) Sociological, philosophical, psychological and historical foundations of western education. Perspectives in these areas as they relate to current educational issues and practices. Three semester hours credit upon consent of department chairman. Prerequisite: Student teaching.

27.403 (26.404) COMPARATIVE EDUCATION (3) A study of patterns of education in different cultural setting with implications for the student of American education. Emphasis on cross-cultural, political, economic and social aspects of education. Prerequisite: Foundations of Education or equivalent.

27.405 (26.452) PHILOSOPHY OF EDUCATION (3) Philosophic dimensions of the teaching learning process, as discriminated and discussed by major philosophers and educational philosophers.

27.407 (26.466) CONTEMPORARY ISSUES IN EDUCATION (3) Seminar approach to current issues in education. Prerequisite: Student teaching or senior standing with consent of instructor.

Graduate Division

27.501 (26.503) EDUCATIONAL IDEAS IN HISTORICAL PERSPECTIVE (3) Current trends and issues in education as reflecting and influencing the social, economic, and political forces in our cultural heritage.

ADULT EDUCATION COURSES (EDFS)

Upper Division – Undergraduate and Graduate

27.485 ADULT EDUCATION (3) Introduction to the historical and philosophical evolution of adult education in the United States in relationship to current aims, types of programs, and issues. Prerequisite: Consent of instructor.

27.487 TEACHING THE ADULT LEARNER (3) Teaching-learning activities at various levels of adult education. The needs, motivation, and abilities of the adult learner are stressed. Prerequisite: Consent of instructor.

27.489 PRINCIPLES OF READING INSTRUCTION FOR ADULTS (3) Causes of adult reading disabilities, evaluation relevant to reading disability, and the methods and materials employed in the remediation process. Prerequisite: Consent of instructor.

ADDITIONAL EDUCATION COURSES (EDPM)

Lower Division — Undergraduate

28.315 (26.385) EDUCATIONAL MEASUREMENT FOR CLASSROOM TEACHERS (2) Problems in measurement; principles underlying choice of test instruments; survey of test literature; dealing with test data; constellation and interpretation of tests.

28.319 (26.319) SURVEY OF EDUCATIONAL PROGRAMS (3) Survey of educational programs and services K-12. Combines theoretical aspects of (26.360), Overview of Elementary Education and (26.361) Principles of Secondary Education. Open only to those students in art, music, physical education or speech pathology whose majors lead directly to certification in elementary and secondary education. Approval must be obtained both from the chairman of the student's major department and from the Director of Teacher Education.

84.371 PLAY PRODUCTION FOR THE CLASSROOM TEACHER (2) Procedures of play selection, casting, planning, rehearsals, scenery, lights and publicity. Problems in acting, directing, and design.

Upper Division — Undergraduate and Graduate

28.401 (26.463) GUIDANCE IN THE PUBLIC SCHOOL (2-3) Scope and function of a guidance program; the role of the classroom teacher in guidance.

28.403 (26.469) EDUCATIONAL TESTS AND MEASUREMENTS (3) Problems in measurement; principles underlying choice of test instruments, survey of test literature; dealing with test data; constellation and interpretation of tests. Not open to those who have had EDUC 28.315 (26.385).

28.405 (26.464) RECENT TRENDS IN TEACHING (3) Emerging concepts of teaching and organization for instruction. Prerequisite: (26.398) or senior standing with consent of instructor.

28.409 (26.483) FIELD STUDIES OF THE CHILD AND HIS COMMUNITY (2) Planning and working with groups of children in approved social agencies or making extensive studies of recreational and non-recreational social agencies. Class discussions and field trips.

28.415 EDUCATIONAL STATISTICS (3) Designed as a practical course in statistics for students in education. Emphasis is upon educational applications of descriptive statistics, including central tendency, variability, and association. Prerequisite: 50.204, 50.205, or equivalent.

28.417 (26.417) CHILDREN'S LITERATURE (3) Examination of children's books; study of content and form.

28.419 (26.418) JUVENILE LITERATURE (3) Examination of juvenile literature apart from textbooks; criteria for this literature; study of content and form.

56.481-482 (26.481, 482) GROUP LEADERSHIP (0,2) Development of skills for counseling the older adolescent. Second semester includes application of theory as student assumes leadership of a freshmen orientation section. Both semesters must be completed to receive credit. Prerequisite: Student Teaching or concurrently with Student Teaching and consent of instructor.

Graduate Division

28.511 (26.511) SUPERVISION OF STUDENT TEACHING (3) An analysis of the roles of the cooperating teacher, college supervisor, and student teacher; current practices, issues, problems, trends and evaluation in laboratory experiences, current research. Prerequisite: teaching experience.

GRADUATE COURSES IN RESEARCH

28.691 (26.595 (506)) INTRODUCTION TO RESEARCH IN EDUCATION (3) Research as a method for solving problems. Contributions of research to education. Prerequisite: Undergraduate course in Tests and Measurements, or Elementary Statistics, or consent of instructor.

28.699 (26.599 (590)) MASTER OF EDUCATION THESIS (3) Carefully executed investigation and accurate recording of a specific problem selected with reference to the student's professional goals and resources. Historical, descriptive, experimental, or action research can provide a single or multiple framework within which the student may work. Includes an outline of the proposed thesis submitted for inspection and approval by the Graduate Council, an application of techniques derived from the research course, and the guidance of Research Adviser.

SAFETY AND DRIVER EDUCATION PROGRAM

Requirements for a Minor in Safety and Driver Education

General requirements:

1. A bachelor's degree
2. A teaching certificate with a teaching major.
or
1. Complete the General Education Requirements.
2. Develop a major and meet certification requirements in the major.
3. Complete the following as elective courses:

a. Educational Psychology	3 credits
b. Principles of Secondary Education	3 credits
c. Audio-Visual Laboratory	1 credit
or	
d. Methods and Materials in New Educational Media	3 credits
e. First Aid Standard or Advanced Red Cross Certificate	1 credit

Specific requirements:

1. Complete 15 credits of required Safety and Driver Education courses: 28.430, 28.431, 28.432, 28.433, and 28.434.
2. Complete 9 credits of Safety, Driver Education or Transportation courses as electives.

SAFETY AND DRIVER EDUCATION COURSES (EDPM)

Upper Division – Undergraduate and Graduate

28.430 (26.471) GENERAL SAFETY EDUCATION (3) Includes a survey of the history and philosophy of the safety education movement, need for safety education, aims and objectives, accident causation and prevention, and the role of education in eliminating environmental hazards and reducing avoidable human error.

28.431 (26.472) DRIVER AND TRAFFIC SAFETY EDUCATION (3) History and philosophy of automobile and highway safety engineering, U.S. and International traffic controls, traffic laws and regulations, critical analysis of traffic accidents and causation, and attitude factors. (May be taken concurrently with 28.432.)

28.432 (26.473) METHODS OF TEACHING IN DRIVER EDUCATION AND SAFETY (3) Specialized techniques for safety and driving instruction, including A-V aids, psycho-physical testing and evaluation, programmed instruction, multiple-car facility, on-street instruction, detonator demonstration and applications. (May be taken concurrently with 28.431.)

28.433 (26.494) DIFF. STUDENT TEACHING IN DRIVER EDUCATION (3) Supervised student teaching in Driver Education, including classroom and in-car, and utilization and planning for multiple-car facility: (May be taken concurrently with 28.434.) Prerequisite: 28.431 and 28.432; Maryland license and 3 years driving experience with good record.

28.434 (26.494) DIFF. STUDENT TEACHING IN DRIVER SIMULATOR (3) Supervised student teaching using driving simulators. Theory, mechanics, techniques, utilization and evaluation of driving simulators. (May be taken concurrently with 28.433.) Prerequisite: 28.431 and 28.432; Maryland license and 3 years driving experience with good record.

28.435 PROGRAMMED INSTRUCTION FOR DRIVER EDUCATION (2) Acquaints students with philosophies and principles of programmed instruction. Analysis and evaluation of commercial programs and teacher-made programs, instructional utilization, current research and trends, direct application of programmed instruction to Driver Education are included. Prerequisite: 15 credits in approved Safety and Driver Education courses and/or approval of Director.

28.436 MULTI-MEDIA TECHNIQUES FOR DRIVER EDUCATION (2) A laboratory approach to the utilization and planning of multi-media instruction of Driver Education. Principles and theory of multi-media communications; planning use; implementation; production of materials; survey of literature and current trends in multi-media instruction as related directly to Driver Education. Prerequisite: 15 credits in approved Safety and Driver Education courses and/or approval of Director.

28.437 AUTO MECHANICS FOR DRIVING INSTRUCTORS (2) Acquaints students with mechanics of automobile to enable him to better teach this area and 'trouble-shoot' in minor mechanical emergencies. Laboratory approach utilized. Prerequisite: 15 credits in approved Safety and Driver Education courses and/or approval of Director.

28.438 (26.475) THE DRIVER, HIS CHARACTERISTICS AND IMPROVEMENT (3) Treatment of the driver-behavior problem in its relation to many of the psycho-physical factors and forces in the traffic environment that impinge upon the man behind the wheel. Prerequisite: 15 credits in approved Safety and Driver Education courses and/or approval of Director.

28.439 (26.478) PUPIL TRANSPORTATION (3) Consideration of organization and administration of state, county, and district pupil transportation service with emphasis on safety and economy. Selection and training of drivers, route planning, maintenance mechanics, bus specifications and procurement are included. Prerequisite: 15 credits in approved Safety and Driver Education courses and/or approval of Director.

28.440 (26.484) PUBLIC SCHOOL TRANSPORTATION OF SCHOOL CHILDREN (3) Consideration of the problems of school bus transportation, solutions employed, and a review of research and techniques in this field. Workshop approach utilized. Prerequisite: 15 credits in approved Safety and Driver Education courses and/or approval of Director.

28.441 (26.474) ADMINISTRATION AND SUPERVISION OF SAFETY EDUCATION (3) Background and experience in administration and supervision of Safety education programs, K-12. Methods, techniques, materials, program planning, records and reports, financing and insurance. Prerequisite: 15 credits in approved Safety and Driver Education courses and/or approval of Director.

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28.442 (28.436) ADMINISTRATION AND SUPERVISION OF DRIVER EDUCATION (3) Background and experience in administration and supervision of Driver Education programs. Methods of organization, techniques, materials, program planning, records and reports, financing and insurance, procurement, personnel selection, planning classroom and in-car laboratory experiences are included. Prerequisite: 15 credits in approved Safety and Driver Education courses and/or approval of Director.

28.443 (26.476) PROBLEMS IN SAFETY AND DRIVER EDUCATION (3) Consideration of the individual problems encountered in the teaching of driver and safety education. The psychology of teaching and learning are emphasized and consideration is given to the implications of emotional and attitudinal factors in driver and traffic education. Prerequisite: 15 credits in approved Safety and Driver Education courses and/or approval of Director.

28.444 (26.477) FIELD STUDIES IN SAFETY AND DRIVER EDUCATION (3) Designed to meet the needs of persons in the field with respect to research projects in special areas. Includes examination of existing courses of study, current trends current research, evaluation, supervision, and techniques. Students will be expected to carry out a special field project in their area of interest. Prerequisite: 15 credits in approved Safety and Driver Education courses and/or approval of Director.

28.445, 446 CURRICULUM DEVELOPMENT IN SAFETY AND DRIVER EDUCATION (3, 3) History of curriculum development in safety and driver education; principles; philosophies; objectives; current practices; evaluation techniques; laboratory experience; and field study. Prerequisite: 15 credits in approved Safety and Driver Education courses and/or approval of Director.

LIBRARY SCIENCE PROGRAM FOR SCHOOL LIBRARIANS

A program leading to a minor in library science and preparation to work in elementary or secondary school libraries is offered by the department of education.

COURSES REQUIRED OTHER THAN LIBRARY SCIENCE

For students taking either the elementary or secondary program, it is recommended strongly that their overall program include no less than 80 semester hours of academic courses. These courses must include at least six hours of a modern foreign language and nine hours of psychology — general psychology, educational psychology, and child development or adolescent psychology. All students who minor in library science must have an academic major, not in education. For secondary students the major should be in English or the social sciences.

EDUCATION COURSES REQUIRED

For Elementary School Library Science Program:

26.461 (26.361) Elementary Curriculum I	4 credits
50.323 (50.363) Teaching Arithmetic in the Elementary School	2 credits
26.462 (26.362) Elementary Curriculum II	6 credits
26.397 (26.397) Student Teaching in the Elementary School	10 credits
27.401 (26.410) Foundations of Education	3 credits

For Secondary School Library Science Program:

27.341 (26.381) Principles of Secondary Education	3 credits
(30.361) Teaching English in the Secondary School	2 credits
(78.379) Teaching Social Studies in the Secondary School	2 credits
17.398 (26.398) Student Teaching in the Secondary School	10 credits
27.401 (26.410) Foundations of Education	3 credits

LIBRARY SCIENCE COURSES (EDPM)

Lower Division — Undergraduate

28.255 (26.255) BACKGROUNDS OF SCHOOL LIBRARIANSHIP (3) History of libraries, role of books and communications media in our culture today, objectives of all types of libraries; literature of librarianship; professional associations, principles and philosophy of librarianship.

Upper Division — Undergraduate Only

28.355 (26.355) REFERENCE MATERIALS FOR SCHOOL LIBRARIANS (3) Introduction to general and subject bibliographies and indexes, trade and national bibliographies, general reference tools, encyclopedias and dictionaries.

28.357 (26.357) ORGANIZATION OF MEDIA CENTERS FOR SCHOOL LIBRARIANS (3) Principles of bibliographic control, use of printed catalog cards, and commercial processing services, introduction to book catalogs, and methods of controlling non-print media.

28.359 (26.359) INSTRUCTIONAL MATERIALS FOR SCHOOL LIBRARIANS (3) Learning materials, k-12, with emphasis on the factual, on multi-media in curriculum areas as social studies, science, language arts, mathematics, etc.

28.455 (26.455) CHILDREN'S LITERATURE FOR SCHOOL LIBRARIANS (3) Emphasizing the multi-media approach this would introduce the student to the wealth of imaginative literature (in print, on recordings, on film, etc.) available for children k-6.

28.457 (26.457) YOUNG ADULT LITERATURE FOR SCHOOL LIBRARIANS (3) Covers fiction, biography, travel — a wide range of recreational and imaginative materials for young people in their teens including means of introducing the materials to young people.

28.459 (26.459) ADMINISTRATION AND SERVICES OF MEDIA CENTERS FOR SCHOOL LIBRARIANS (3) Culminating course. Emphasis on evaluation of the community and services of media center. Analysis of student and faculty community and range of services — reading guidance, reference and instructional services.

URBAN EDUCATION PROGRAM — PROJECT MISSION

Project Mission is a program designed to train teachers to teach in the inner city schools. Towson, Morgan and Coppin State Colleges have joined with the Baltimore City Public Schools in offering this specialized training. The curriculum is offered in an inner city school in Baltimore City with one half of the day spent in the classroom with a master teacher. The other half

of a day is spent in the same schools with the project professors from the three colleges. Eligibility is limited to college seniors and graduate students with no teaching experience. In the past students have received stipends of between \$1,500 and \$2,000 annually in addition to a \$200 allowance to attend summer school for the purpose of taking courses required for graduation.

URBAN EDUCATION COURSES (EDPM)

Upper Division – Undergraduate and Graduate

28.371-372 (28.480-28.481) PSYCHOLOGICAL FOUNDATIONS (1, 2) Psychological understanding needed for guiding the learning of disadvantaged children and youth. The values, attitudes, and aspirations as well as the cognitive learning style of disadvantaged students.

28.373-374 (28.484-28.485) SOCIOLOGICAL FOUNDATIONS OF URBAN EDUCATION (1, 2) Introduction to concepts and principles related to the social foundation in an urban environment. Planned to help students to relate themselves positively and functionally to the social aspects of education and to integrate these into their professional skills and attitudes.

28.375-376 (28.486-28.487) INTEGRATED FIELD EXPERIENCES (2, 2) This course provides first hand experiences relating theory and practice in Psychological and Sociological Foundations and Communication Skills.

28.377-378 (28.488-28.489) COMMUNICATION SKILLS (1, 2) Speech, semantics, linguistics and sentence structure, a communication model, and psychological aspects of communication.

28.381-382 (28.490-28.491) (490-491) METHODS AND MATERIALS IN ELEMENTARY EDUCATION (3, 3) Focus on reading, diagnosis of disabilities, special concerns for the disadvantaged child, remediation techniques. Pedagogy, planning and organizing, presentation, evaluation, use of realia, and teaching the language arts.

28.383-384 (28.492-28.493) METHODS AND MATERIALS IN SOCIAL STUDIES IN THE SECONDARY SCHOOLS (3, 3) Teaching social studies at the junior high level to disadvantaged youth. In addition, attention is given to such topics as: the curricular organization of social studies, developing social studies skills, instructional planning, social studies materials and resources, and evaluation in the social studies.

28.385-386 (28.494-28.495) METHODS AND MATERIALS — ENGLISH (3, 3) Methods and materials which may be used in directing the language and literary experiences of disadvantaged adolescents. Emphasis is placed on creativity and imagination in developing new approaches to meeting the classroom needs of the disadvantaged. The course gives particular attention to techniques for developing skills in reading and oral communication.

28.471-472 (28.496-28.497) SEMINAR IN INSTRUCTIONAL AID AND RESOURCES (2, 2) Opportunities will be provided for the student to become acquainted with all types of instructional materials. As new instructional aids become available, students will examine and evaluate their usefulness in the instructional programs of educationally deprived children. In addition, resource personnel of the Baltimore City Department of Education, the cooperating colleges, and the community will be brought in to discuss their contributions to the improvement of the school programs of the disadvantaged child. Because of the nature of the course no credit is being offered.

28.477-478 (28.498-28.499) INTERNSHIP IN TEACHING (6, 6)

Graduate Division

28.571-572 (28.501) TEACHING THE DISADVANTAGED CHILD (3) Concern will be given to planning, organizing, and providing of appropriate curriculum experiences for pupils in urban schools. Emphasis will be placed on those methods and materials which are especially appropriate to meeting the needs of children attending schools in disadvantaged communities.

28.575 (28.515) BACKGROUNDS IN URBAN EDUCATION (3) This course aims to acquaint teachers with sociological factors, family organization and disorganization, and educationally deprivation of children living in a crowded and urbanized society. Attention will be given to the special learning styles of these pupils.

28.577 (28.571) SEMINAR IN URBAN EDUCATION (3) This course is designed as an advanced course for those who have had previous courses in this field and who are engaged in working with children who are educationally disadvantaged. It will focus on anthropological, ecological and psychological research related to the problems of the disadvantaged learner.

WORKSHOPS

28.467 (26.487) TEAM TEACHING WORKSHOP (3) Conducted to assist teachers who are actively engaged in team teaching or will be participating as members of a team in the future.

76.488 (26.488) AEROSPACE EDUCATION-WORKSHOP (3) In cooperation with CAP, USAF, NASA and others. For elementary and secondary school teachers, supervisors, and administrators. A fund of general knowledge about aviation and space exploration, their impacts, and the development of resources for uses in teaching. Field trips, two of which may extend all day. Air and ground transportation by the college and cooperating agencies.



ENGLISH

Professor: BEVINS (Chairman), HENRY, LEWIS, SARGENT, THEARLE

Associate Professors: GUESS, HANSON, HUGHES, PLANTE, SHEETS, WRIGHT

Assistant Professors: CARSON, COULTER, CRAVER, DOWLING, ECONOMOU, FLOWER, FRIEDMAN, HATCHER, HEDGES, JONES, KOOMJOHN

Instructors: BENSON, BLANKENBURG, DOUGLAS, FRANKEL, HAHN, K. KEANEY, W. KEANEY, MAYO, OVERBEY, PATTERSON, SINKHORN, THOMAS, WOLFE

COLLEGE ENGLISH REQUIREMENTS

Every student in the College must complete 30.102 or 30.104 and one semester (3 credit hours) of a lower-division survey course in English, American, or World Literature 30.201, 202, 204, 205, 211, or 212. A student may offer a third course in English in partial fulfillment of the General Education Requirements of the College. He may, of course, offer other English credits as elective credit.

ENGLISH COURSE PREREQUISITES

30.102 or 30.104 is prerequisite to all other English courses. The second course will be one of the following: 30.201, 30.202, 30.204, 30.205, 30.211, 30.212. Concurrently with the survey course or courses, a student may take any lower-division (200-level) elective in English. Three English courses, including 30.102 or 30.104, are prerequisite to registration for upper-division (300 or 400 level) English courses.

ENGLISH MAJOR

To satisfy the requirements for the major a student must complete 36 semester hours of work in the departmental offerings in language, composition, and literature.

The 36 hours will include either 30.102 or 30.104, 30.204-30.205, 30.233. Four additional hours of lower division work may be counted toward a major, with 30.224 and 30.243 recommended.

Upper-division courses must include 30.351 Approaches to English Study. At least one course must be selected from the courses in Language or Literary Criticism:

- 30.325 (325) HISTORICAL LINGUISTICS
- 30.327 (327) STRUCTURAL LINGUISTICS
- 30.332 (332) COMPARATIVE GRAMMAR
- 30.430 (430) HISTORY OF THE ENGLISH LANGUAGE
- 30.431 (431) STRUCTURE OF THE ENGLISH LANGUAGE
- 30.432 (432) OLD ENGLISH LANGUAGE
- 30.433 (433) MIDDLE ENGLISH LANGUAGE
- 30.405 (405) LITERARY CRITICISM I
- 30.406 (406) LITERARY CRITICISM II

At least one course from each of two of the following three lists of period courses:

(a) Beginnings to 1700

- 30.302 (302) THE ENGLISH RENAISSANCE
- 30.303 (303) NON-DRAMATIC ENGLISH LITERATURE OF THE SEVENTEENTH CENTURY
- 30.319 (319) ENGLISH MEDIEVAL AND RENAISSANCE DRAMA
- 30.340 (340) MEDIEVAL LITERATURE

(b) 1700 to 1832

- 30.320 (320) ENGLISH DRAMA FROM THE RESTORATION TO SHAW
- 30.335 (335) LITERATURE OF THE ENGLISH ROMANTIC PERIOD
- 30.345 (345) EIGHTEENTH CENTURY ENGLISH PROSE AND POETRY
- 30.422 (422) DEVELOPMENT OF THE ENGLISH NOVEL
- 30.427 LITERATURE OF THE AMERICAN ROMANTIC PERIOD

(c) 1832 to the present

- 30.309 AMERICAN DRAMA
- 30.337 VICTORIAN PROSE AND POETRY I
- 30.338 VICTORIAN PROSE AND POETRY II
- 30.348 MAJOR AMERICAN POETS
- 30.423 (423) DEVELOPMENT OF THE ENGLISH NOVEL
- 30.425 (425) THE AMERICAN NOVEL FROM HAWTHORNE TO THE PRESENT

One course must be selected from Major Figure courses:

- 30.410 (410) CHAUCER
- 30.412 (412) MILTON

30.415 (415) SHAKESPEARE (COMEDIES)

30.416 (416) SHAKESPEARE (TRAGEDIES)

One course from any one of the above lists or from other departmental electives must be in American literature.

The English Department strongly recommends that every major complete at least the intermediate level of a foreign language.

The Department participates in the Advanced Placement Program of the College. A selected number of entering freshman are placed in 30.104 rather than in 30.102. It also offers an honors program on the upper-division level.

Students interested in majoring in English or in participating in any of its programs should consult their advisers and the Chairman of the Department.

ENGLISH COURSES (ENGL)

Lower Division — Undergraduate

30.102 (102) FRESHMAN COMPOSITION (3) Review of grammar, writing of compositions, and reading of various forms of literature.

30.104 (104) ADVANCED FRESHMAN ENGLISH (3) Readings in expository and imaginative literature, short compositions, and a research paper. Open only to freshman selected by the English Department on the basis of superior high school records and aptitude test scores; for them 30.104, replaces 30.102.

30.201 (333) READINGS IN WORLD LITERATURE (3) European writings in translation from the time of Homer to the Renaissance.

30.202 (334) READINGS IN WORLD LITERATURE (3) European writings in translation from the Renaissance to 1900.

30.204-30.205 (204-205) ENGLISH LITERATURE (3, 3) First semester — Chaucer through Milton, Second semester — Dryden through G. B. Shaw.

30.207 HISTORY OF AMERICAN ENGLISH (2) Origins and history of American dialects; development of elements of vocabulary, sounds, and grammar which distinguish American English; standards of American English.

30.210 (210) INTRODUCTION TO FOLKLORE (2) Celtic and other types of folklore which provide a wide and varied background for literature.

30.211 (307) AMERICAN LITERATURE (3) Major writers from the Colonial Period to the Civil War.

30.212 (308) AMERICAN LITERATURE (3) Major writers since the Civil War.

30.215 (215) THE BALLAD (2) The popular ballad as a literary form: its origin, sources, characteristics, and literary influence.

30.224 (224) ELEMENTS OF FICTION (2) Techniques of fiction, with emphasis on the short story.

30.226 (226) INTRODUCTION TO CLASSICAL MYTHOLOGY (2) The study of myth in selected works from Greek and Roman literature.

30.233 (233) ELEMENTS OF POETRY (2) Versification, and the forms and purposes of poetry.

30.243 (102) ELEMENTS OF DRAMA (2) Forms of drama, with emphasis upon structure and conventions.

30.283 INTRODUCTION TO IMAGINATIVE WRITING (2) Theories and technical considerations pertinent to writing poetry and fiction, with discussion of student writing.

Upper Division — Undergraduate Only

30.331 (331) ADVANCED EXPOSITION (3) Study of expository style, with practice in criticism, and analysis.

30.332 (332) COMPARATIVE GRAMMAR (3) Study of English grammar; traditional, structural, transformational.

30.351 APPROACHES TO ENGLISH STUDY (2) English as an academic discipline; critical approaches to literature; methods of investigation in language and literature. (Restricted to undergraduate English majors. To be elected as soon as the English major has completed 3 lower-division courses in English.)

30.383 (383) IMAGINATIVE WRITING (3) The nature of the creative process and the art of imaginative expression. Concentration in writing fiction or in writing poetry, alternating in different semesters. Prerequisite: Upper division standing and consent of instructor.

Upper Division — Undergraduate and Graduate

30.301 TOPICS IN WORLD LITERATURE (2) Consideration of special figures, periods, genres, or conventions. Variation in content from year to year; may be re-elected.

30.302 (302) THE ENGLISH RENAISSANCE (3) Non-dramatic literature of the Elizabethan period. (Formerly 424)

30.303 (303) NON-DRAMATIC ENGLISH LITERATURE OF THE SEVENTEENTH CENTURY (3) Major English non-dramatic literature of the seventeenth century; the approach will be both critical and historical.

30.305 TOPICS IN ENGLISH LITERATURE (2) Consideration of special figures, periods, genres or conventions. Variation in content from year to year; may be re-elected.

30.309 AMERICAN DRAMA (3) A study of American drama from the beginning to the present.

30.311 TOPICS IN AMERICAN LITERATURE (2) Consideration of special figures, periods, genres, or conventions. Variation in content from year to year; may be re-elected.

30.312 (312) WORLD DRAMA I (3) An historical and critical study of world drama and the cultural forces which produced it from the ancient Greeks to the Neo-Classical period.

30.313 (313) WORLD DRAMA II (3) An historical and critical study of world drama and the cultural forces which produced it from the Neo-Classical period to the late nineteenth century.

30.317 (317) LITERARY BIOGRAPHY (3) Critical reading from the literary point of view of important biographies, principally English and American.

30.319 (319) ENGLISH MEDIEVAL AND RENAISSANCE DRAMA (3) Development of the English Drama from the Middle Ages through the Renaissance, excluding Shakespeare.

30.320 (320) ENGLISH DRAMA FROM THE RESTORATION TO SHAW (3) Development of the English Drama in the seventeenth, eighteenth, and nineteenth centuries.

30.321 (321) MODERN DRAMA (3) Critical reading of plays of the late nineteenth century and the twentieth century.

30.323 THE CONTINENTAL NOVEL (3) A study of major continental novels in translation. Emphasis will be upon related and comparative elements in the novels of writers of France, Germany, Italy and other European countries.

30.325 (325) HISTORICAL LINGUISTICS (3) An introduction to language typology and Indo-European philology; historical development of linguistics up to the twentieth century.

30.326 (326) MYTH AND LITERATURE (3) The reinterpretation of themes and figures from Greek and Roman mythology.

30.327 (327) STRUCTURAL LINGUISTICS (3) A study of the developments in linguistic theory in the twentieth century; major figures, De Saussure, Sapir, Bloomfield, Trubetzkoy, Chomsky.

30.328 (328) HISTORY AND LITERATURE OF THE OLD TESTAMENT (3) The chief books of the Old Testament and the Apocrypha studied from a literary and historical point of view.

30.335 (335) LITERATURE OF THE ENGLISH ROMANTIC PERIOD (3) Major writers, social and political background, important literary ideas, and criticism.

30.337 VICTORIAN PROSE AND POETRY I (3) A study of the works of Tennyson; Arnold; and the Victorian "prophets" — Macauley Carlyle, Newman, and Mill.

30.338 VICTORIAN PROSE AND POETRY II (3) A study of the works of Browning; Ruskin and the Pre-Raphaelites; Pater, Hardy, Housman, and Yeats.

30.340 (340) MEDIEVAL LITERATURE (3) English literature during the Middle Ages.

30.345 (345) EIGHTEENTH CENTURY ENGLISH PROSE AND POETRY (3) Major eighteenth century English prose and poetry; the approach will be both critical and historical. The novel will not be studied.

30.348 MAJOR AMERICAN POETS (3) A study of major American poets with emphasis on the period from Walt Whitman to the present.

30.401 THE LITERATURE OF BLACK AMERICA (3) The literature of black expression in the United States with emphasis on the twentieth century. Non-fiction, fiction, and poetry by black writers will be studied.

30.405 (405) LITERARY CRITICISM I (3) History and principles of literary criticism. Specified prerequisites and consent of instructor.

30.406 (406) LITERARY CRITICISM II (3) Practice in writing literary criticism. Specified prerequisites and consent of instructor.

30.407 (407) MODERN POETRY (3) Work of the important twentieth century poets. (Formerly 319).

30.408 (408) MODERN FICTION TO WORLD WAR II (3) Work of the modern masters of fiction.

30.409 (409) MODERN FICTION SINCE WORLD WAR II (3) Works of the significant writers — English, American, and Continental — of the past twenty years. The works of these writers carry on or challenge the tradition established by the modern masters of fiction.

30.410 (410) CHAUCER (3) A study of the major poetry.

30.412 (412) MILTON (3) A study of the poetry and major prose works.

30.415 (415) SHAKESPEARE (COMEDIES) (3) Shakespeare's development as a poet and a dramatist during the period of the comedies and historical plays.

30.416 (416) SHAKESPEARE (TRAGEDIES) (3) The great tragedies and the late romantic comedies of Shakespeare.

30.422 (422) DEVELOPMENT OF THE ENGLISH NOVEL (3) History and development of the English novel through the eighteenth century

30.423 (423) DEVELOPMENT OF THE ENGLISH NOVEL (3) History and development of the English novel through the nineteenth century.

30.425 (425) THE AMERICAN NOVEL FROM HAWTHORNE TO THE PRESENT (3)

30.427 LITERATURE OF THE AMERICAN ROMANTIC PERIOD (3) Major writers, social and political background important literary ideas, and criticism.

30.430 (430) HISTORY OF THE ENGLISH LANGUAGE (3) Changes and reasons for the changes in grammar, sound, and vocabulary of the language, from Old English to modern times.

30.431 (431) STRUCTURE OF THE ENGLISH LANGUAGE (3) A linguistic approach to sounds, forms, syntax, and usage.

30.432 (432) OLD ENGLISH LANGUAGE (3) Grammar and syntax of Old English; translation of elementary texts; introduction to Germanic philology.

30.433 (433) MIDDLE ENGLISH LANGUAGE (3) Grammar and syntax of Middle English; study of Middle English dialects; reading of selected texts of twelfth to fifteenth centuries.

30.485, 486 (440, 441) SEMINAR IN ENGLISH STUDIES (3, 3) Thorough study of one major area of English or American literature (author, period, movement, etc.) not available through other electives. Areas covered will vary from semester to semester. Emphasis on research and scholarly writing with extensive research paper required. Open only to seniors and, with consent of the instructor, to juniors having an exceptionally strong background in English. May be taken one or two semesters.

30.491 (480) DIRECTED READING IN ENGLISH (2 to 4) Independent reading in selected areas of English, in order to provide for the individual a comprehensive coverage of skills expected by the department. By invitation of Department to major or honor students. Students are advised to register for 2 semesters of this course, with 2 hours each semester.

30.494 TRAVEL AND STUDY (3-6) Countries and topics to be selected by the Departments and instructors sponsoring the program. For enrollment procedures, write the Chairman of the Department early in the fall of the academic year preceding the summer of intended study.

30.499 (495) SENIOR THESIS (2, 2) A sustained, independent inquiry into a literary or linguistic problem, presenting conclusions in acceptable scholarly manner. The student must enroll for 2 semesters of the thesis course, but the credit for the first semester is withheld until the second semester is successfully completed. Prerequisite: Participation in department honors program.



GEOGRAPHY

Professors: BEISHLAG, FIRMAN (Chairman)

Assistant Professor: HAYUK

Associate Professors: DIFFENDERFER, MARTIN

Instructors: WALTON, STEVENSON

The Department offers a major or minor in geography. The purpose of the major is to encourage the student to explore the discipline in some depth. Such investigation, performed well, leads to an appreciation of the structure and function of the area, prepares the student for graduate work, and offers excellent background for many careers, particularly teaching and certain types of government service. The student is also expected to take correlative courses which broaden his academic background and offer valuable insights into the subject.

Students not interested in specialization may elect the social studies interdisciplinary major listed in the Department of Economics and Political Science and Department of Sociology.

GEOGRAPHY MAJOR

Thirty credit hours are required as a minimum for the major in geography, including fourteen or fifteen hours of required courses and fifteen or sixteen hours of electives. The required courses are 34.101, 34.102, 34.421, 34.231, and one of the following: 34.323, 34.381, 34.373, 34.391.

GEOGRAPHY MINOR

Twenty-four credit hours are required as a minimum for the minor in geography, including fourteen or fifteen hours of required courses (the same as for the major) and nine or ten hours of electives.

GEOGRAPHY COURSES PREREQUISITES

34.101 and 34.102 or consent of instructor are prerequisites for all other geography courses, with the exception of 34.495 (Directed Reading in Geography), which is specified under that course.

MASTER OF ARTS IN GEOGRAPHY

The Master of Arts in Geography is designed for students who are primarily interested in an advanced degree.

Admission to Courses in Geography for Graduate Credit

- A. Acceptable achievement on the Graduate Record Examination in geography.
- B. At least an undergraduate minor in geography or the equivalent.
- C. At least a 3.00 or "B" grade average in the geography courses presented for admission.
- D. Under extraordinary or peculiar circumstances a applicant who does not meet all of the above requirements may petition the Department of Geography for admission.

Program for the Master of Arts in Geography

- A. *Candidacy*: After 9 semester hours and before the completion of 15 hours of graduate study in geography, at least one half must have been taken in 500 level courses.
- B. *Number of 500 level courses*: At least 15 semester hours in Graduate Geography must be earned at the 500 level.
- C. *Grade Average*: A student must maintain a 3.00 average after candidacy.
- D. *Comprehensive Examination*: The student must take and pass a final comprehensive examination not earlier than the term during which he will complete his course work.
- E. *Statute of Limitations*: All requirements must be completed by August of the seventh year of graduate study.
- F. *Credit Transfer*: Six semester graduate hours in geography may be transferred from another institution and applied. A student may petition the department for consideration of transfer credits that exceed six semester graduate hours.
- G. *Specific Requirements*.
 1. Each student, in consultation with his adviser, will prepare a program of study in geography and will present it to a Graduate Committee of the Geography Department. Candidates may be required to justify their program before the Committee.
 2. *Foreign Language Requirements*: Students must present evidence of at least a fourth semester of college level competency in one modern language before advancement to candidacy.

3. *Thesis:* All students will be required to present a thesis in geography which must demonstrate the student's ability to do independent research.
4. *Oral Examination:* An oral examination may be given as a part of the comprehensive examination after the successful completion of the course work.
5. *Prescribed Courses:*

Seminar: Selected Topics in Geography	2 sem. hours
Research Techniques in Geography	3
Field Geography	3
Research (Thesis)	6
Electives in Geography	16
	30 sem. hours

GEOGRAPHY COURSES (GEOG)

Lower Division — Undergraduate

34.101 (103) ELEMENTS OF GEOGRAPHY (3) Elements of man's environment and the changes resulting from natural and human agencies; map reading and interpretation.

34.102 (104) ELEMENTS OF GEOGRAPHY (3) Man in his regional settings with emphasis on the interrelationships of physical and cultural phenomena.

34.121 INTERPRETATION OF MAPS (3) Introduction to map elements and map interpretation; study of various types of maps, index systems, and general application of maps in geography.

34.221 (307) CULTURAL GEOGRAPHY (3) Study of origins and diffusion of cultures and the resulting impact in creating the world's contrasting cultural landscapes.

34.231 (316) ECONOMIC GEOGRAPHY (3) Regional distribution of the world's resources, industries, and population; emphasis upon problems of international trade. An analysis of the productive and extractive industries, manufacturing and commerce in relation to the geographic environment.

34.299 INTRODUCTION TO SOURCE MATERIALS AND RESEARCH IN GEOGRAPHY (3) Designed to provide the student with a basic working knowledge of research materials; study and review of principal reference literature, journals, and other sources of data used in geographic field and library research.

Upper Division — Undergraduate and Graduate

SYSTEMATIC COURSES

34.361 ADVANCED ECONOMIC GEOGRAPHY (3) Studies mainly of the secondary and tertiary industries with some emphasis on quantitative analyses of selected economic activities.

34.371 (301) ADVANCED PHYSICAL GEOGRAPHY (3) Detailed analysis of characteristics, distribution, and geographical significance of the earth's physical features.

34.373 (395) CLIMATOLOGY (3) Character, causes, and distribution of climatic types. Emphasis upon world patterns. Students may be required to do field work.

34.381 (331) POLITICAL GEOGRAPHY (3) Effect of political groupings upon man's use of the world, and the influence of the geographic base upon political power.

34.391 (413) URBAN GEOGRAPHY (3) Survey of the structure, functions, forms and development of urban units. Emphasis upon the locational features of social, economic, and cultural phenomena. Field work.

34.401 GROWTH OF GEOGRAPHIC THOUGHT (3) History, nature, and methodology of geography as a discipline. Analysis of schools of geographic thought; critical evaluation of important geographic works.

TECHNIQUE COURSES

34.321 (300) INTERPRETATION OF AERIAL PHOTOGRAPHS (3) Reading and interpretation of aerial photographs. The application of the aerial photograph in the fields of geography, geology, and photogrammetry.

34.323 (330) CARTOGRAPHY (3) Study in design, construction, and effective application of maps and charts for analysis and publication; practical exercises in the use of cartographic tools, materials, and techniques.

34.327 MAP ANALYSIS AND INTERPRETATION (3) Principal types of maps and their uses. Emphasis on understanding map components and the range of physical and cultural phenomena indicated on maps. Includes selected exercises which illustrate the analytical and graphical values of maps.

34.341 TECHNIQUES AND MATERIALS FOR GEOGRAPHY TEACHERS (3) A systematic review of geographic concepts in relation to interdisciplinary studies in the physical and social sciences. Examination of the content of geography and problems of presentation.

REGIONAL COURSES

34.421 (230) GEOGRAPHY OF ANGLO-AMERICA (3) Common social, economic, and political interests of the major regions of the United States and Canada. The culture patterns of each region in relation to the natural settings in which they have developed.

34.423 (320) HISTORY AND GEOGRAPHY OF MARYLAND (3) Political, social and economic development of the state and its relation to major events in the development of the nation. Natural resources; regional land use; industrial development, particularly in the Baltimore area. Field trips. Field trip expenses about \$15.00, payable when trips are taken.

34.431 (318) GEOGRAPHY OF AFRICA (3) Material resources and human geography of Africa. Problems of economic development, nationality and cultural conflicts.

34.441 (390) GEOGRAPHY OF AUSTRALIA AND OCEANIA (3) Regional approach in analyzing and interpreting the physical and cultural patterns, natural resources, current problems, and strategic importance of the Pacific world.

34.443 (315) GEOGRAPHY OF EAST ASIA (3) Regional studies of the physical and cultural foundations in China, Japan, and Korea. Emphasis upon human and economic resources, and role in world affairs.

34.445 (314) GEOGRAPHY OF SOUTH AND SOUTHEAST ASIA (3) Regional studies of the physical and cultural foundations of India, Pakistan, Ceylon, Philippines, and Indonesia. Principal human and economic resources, problems of development, and role in world affairs.

34.451 (311) GEOGRAPHY OF EUROPE (3) Regional analysis and appraisal of the human geography and natural resources of Europe. Problems of nationality, economic development, and cultural conflicts.

34.453 (319) GEOGRAPHY OF THE USSR (3) Physical and cultural patterns and their bearing on the Soviet Union as a world power. Regional distribution and use of natural and human resources in agriculture and industry. Problems in economic development and production.

34.461 (309) GEOGRAPHY OF LATIN AMERICA (3) Distribution and character of the economic activities in various Latin American countries in relation to physical and cultural features. Resources and problems of their development; importance of foreign trade to the economy; relationship with the United States.

SEMINARS AND SPECIAL COURSES

34.481 SEMINAR: SELECTED TOPICS IN GEOGRAPHY (3) Reading and research in selected topics in the field of geography. Seminar topics will be announced.

34.483 (487) SEMINAR: THE AMERICAS (3) Individual study in selected problems of the geography of the Americas.

34.485 (488) SEMINAR: SOUTH ASIA (3) Reading, research, and discussions on special topics related to India, Pakistan, Ceylon, the Himalayan Kingdoms, and Afghanistan.

34.487 (489) SEMINAR: GEOGRAPHY AND MAN IN THE 20th CENTURY (3) Selected studies on the role of geographic factors in economic and political affairs and in the development of technology. Analysis of contributions of applied geography to the solution of urban and rural problems.

34.493 FIELD GEOGRAPHY (2-6) Practical laboratory experience in techniques in the collection and analysis of data by observations, measurements, mapping, and photographic records. Such techniques are to be applied to selected geographic problems.

Graduate Division

34.521 RESEARCH TECHNIQUES IN GEOGRAPHY (3) A course designed to investigate the primary sources of information in geography and to learn the nature of original investigation.

34.571 STUDIES IN PHYSICAL GEOGRAPHY (3) The study of selected geographical topics dealing with physical landscape phenomena, especially in regards to distribution, relationships, and significance to man. Topics will be announced. No more than six semester hours may be applied toward a degree.

34.581 SEMINAR IN POLITICAL GEOGRAPHY (2-6) Special subjects dealing with the geography of international politics, e.g. boundary problems, global strategy, space, sovereignty. Topics to be announced. No more than six semester hours may be applied toward a degree.

34.591 URBAN GEOGRAPHY STUDIES (2-6) Selected topics dealing with the application of geography to planning, retail and industrial location, and trade analysis. Topics to be announced. No more than six semester hours may be applied toward a degree.

34.601 LAND USE STUDIES (2-6) Certain selected problems on urban, rural and rural-urban landscapes which consider and account for geographic differences in land utilization. Topics will be announced. No more than six semester hours may be applied toward a degree.

34.671 SEMINAR IN REGIONAL GEOGRAPHY (2-6) The description, analysis and interpretation of natural and cultural phenomena in certain significant geographic regions. Seminar topics will be announced. No more than six semester hours may be applied toward a degree.

34.697 RESEARCH (2-6) Directed investigation of a pertinent and appropriate geographical problem or problems based upon field and library study, which will contribute to geographical knowledge. Designed for the Masters thesis credit or individual research.

Attention is also called to the following courses:

24.331 COMPARATIVE ECONOMIC SYSTEMS (Economics Department)

64.121 GENERAL GEOLOGY (Physical Sciences)

64.222 GEOMORPHOLOGY (Physical Sciences)

50.231 BASIC STATISTICS (Mathematics)

HEALTH EDUCATION

DIVISION OF HEALTH AND PHYSICAL EDUCATION: N. L. SHEETS, Director

Associate Professor: BRUESS (Chairman)

Instructors: ANDERSON, GOETZ

The health education courses deal with the basic needs of the human organism for health, growth, and development, and stress the responsibility of the individual for maintaining his own health and contributing to that of others.

MAJOR IN HEALTH EDUCATION

To satisfy the requirements for the major, the student must complete, in addition to the General Education requirements, 17 semester hours of professional educational requirements, 31 semester hours of health education major requirements, and 25 semester hours of electives, both general and in the field of health. The health major will prepare students to teach health in the public schools of Maryland and in certain instances to work in community health agencies. For further information, consult the Health Education Chairman.

REQUIREMENTS FOR THE HEALTH EDUCATION MAJOR

In addition to the General College Requirements, the following courses are required of Health Education majors:

Professional Education

- 27.101 Introduction to Teaching
- 28.319 Survey of Educational Programs
- 26.398 Student Teaching
- 27.401 Foundations of Education
- 70.203 Educational Psychology
- 38.205 Teaching of Health

Health Education Requirements

- 38.103 First Aid
- 38.401 Sex Education

- 38.201 The School Health Program
- 38.202 Principles and Practices in Public Health
- 38.205 Teaching of Health
- 38.301 Health Education Curriculum
- 38.104 Health Problems of Children & Youth
- 38.204 Nutrition
- 14.113 Anatomy and Physiology
- 14.318 Microbiology
- 22.201 Chemistry
- 70.420 Mental Hygiene
- 38.302 Preparation for Field Work in Public Health
- 38.303 Field Work in Public Health
- 38.402 Health Seminar

Electives in Health

- 38.202 Principles and Practices in Public Health
- 38.203 First Aid Instructors
- 38.206 Health and Urban Living
- 38.207 Medical Care in the United States

HEALTH COURSES (HEAL)

Lower Division — Undergraduate

- 38.101 CURRENT HEALTH PROBLEMS (3) Health problems of current interest or importance on an individual, community, national, and international basis. Includes a general overview of the state of the nation's health.
- 38.103 FIRST AID (1) Designed for people who may be called upon to give first aid care in the course of their daily activities. Course content of the American Red Cross Standard and Advanced First Aid Courses is included. Red Cross First Aid Certificates awarded. Two hours per week.
- 38.104 HEALTH PROBLEMS OF CHILDREN AND YOUTH (3) The present health status of children and young people in the United States. Review of normal growth and development with emphasis on hazards to life and health, community resources for dealing with health problems of children and youth, and the role of the school.
- 38.201 THE SCHOOL HEALTH PROGRAM (3) The place of health in the school program, and co-ordination of the work of teachers and school health services. Techniques for encouraging desirable health habits and for observing the health of the child in the classroom. Prerequisite: Health 38.101.
- 38.202 PRINCIPLES AND PRACTICES IN PUBLIC HEALTH (3) Principles and practices in the field of public health, and the organization and administration of various agencies. Major public health problems.
- 38.201 FIRST AID INSTRUCTORS (1) American Red Cross First Aid Course for Instructors certification.
- 38.204 NUTRITION (2-3) A basic course covering the chemical nature and utilization of nutrients; the composition, digestion, absorption of foods; and the normal nutritional requirements of the human body, with attention to the relationship between nutrition and general health. Prerequisite: Chemistry 22.101-102, or consent of instructor.

38.205 THE TEACHING OF HEALTH (3) Principles, methods, materials, and resources involved in teaching health. Direct, correlated, and integrated curricular patterns. Prerequisite: Health 38.101.

38.206 HEALTH AND URBAN LIVING (3) Study of those conditions of urban living with particular relevance for the health and well-being of urban dwellers. Nature, extent, and programs and problems in dealing with atmospheric pollution, water supply, housing, sanitation, behavioral disorders, mental illness, communicable disease, etc. Prerequisite: Health 38.101: Introduction to Sociology.

38.207 MEDICAL CARE IN THE UNITED STATES (3) An examination of the medical care process and the medical care system; the health occupations, hospitals, and related institutions; the drug industry; the organization of services and financing; the quasi-public sector, social values and responsibilities, and current trends in health care.

Upper Division — Undergraduate and Graduate

38.301 HEALTH EDUCATION CURRICULUM (3) Developing school health programs of instruction based on health needs and problems of school children. Prerequisite: Health 38.205.

38.302 PREPARATION FOR FIELD WORK IN PUBLIC HEALTH (3) Examination of techniques needed to work in various public health capacities; observation of public health situations.

38.303 FIELD WORK IN PUBLIC HEALTH (8) Practical experience in participation in public health situations.

38.401 SEX EDUCATION AND FAMILY LIFE (3) Discusses historical, physiological, sociological, psychological, and religious aspects of sex. Presentations will include guest speakers, panel discussions, and audio-visual aids. Prerequisite: Psychology 70.201; Health 38.101; Biology 14.101.

38.402 HEALTH SEMINAR (3) Examination of recent trends in school and public health, reports of student projects, consultation with experts in health field.



HISTORY

Professors: H. ANDREWS, BLUMBERG, FALCO, KERR, MATTHEWS, McCLEARY
MRUCK

Associate Professors: J. COX, KAHL (Chairman), LAREW, RYON

Assistant Professors: BOLES, HIRSCHMANN, JOCHENS, PIOTROWSKI, RIVERS,
F. SANDERS, SCHOLNICK, WHITMAN, VAN OSDELL

Instructors: ESSLINGER, McWILLIAMS, SCARPACI

Lecturers: P. BELL, ELLERY, LIVERMORE

The Department offers a major to encourage the student to explore in some depth the study of history. Such investigation, performed well, leads to an appreciation of the structure and function of the discipline, prepares the student for graduate work, and offers excellent background for many careers, particularly teaching and certain types of government service. The student is also expected to take correlative courses which broaden his academic background and offer valuable insights into his major subject. The Department of History also strongly recommends the completion of two years of a foreign language.

The Department also offers an honors program in history. Eligibility requirements and rules governing the college honors program are described elsewhere in this Bulletin. Students interested in the history honors program should consult their advisers and the Chairman of the Department.

Students not wishing to specialize in history may be interested in the interdisciplinary majors in social science or in international studies described in separate sections of this Bulletin.

REQUIREMENTS FOR THE MAJOR

Thirty-six credit hours are required as a minimum for the major in history, including eighteen hours of required courses and eighteen hours of history electives. The required courses are History 40.145, 40.146, 40.263, 40.264, 40.299 and three hours from courses in African, Asian or Latin American history. Twelve hours of elective credits must be in upper division courses. Further details about requirements and policies concerning the major may be

obtained in the Department office. Majors should register with the Department and select an academic adviser during the second semester of the freshman year or the beginning of the sophomore year.

HISTORY COURSES (HIST)

Lower Division – Undergraduate

40.101 (260) THE ANCIENT NEAR EAST AND GREECE (3) Early Stone Age Man, and the rise and fall of the civilizations of the Near East and Greece.

40.102 (261) THE ROMAN WORLD (3) Emergence of republican Rome, her conquest of the Mediterranean World, and the emergence and decline of the Empire.

40.109 (109) INTRODUCTION TO SOUTH ASIAN CIVILIZATION (3) The development of the civilization of South Asia with emphasis on the rise of British rule and its replacement by the republics of Pakistan, India and Ceylon.

40.110 (110) INTRODUCTION TO EAST ASIAN CIVILIZATION (3) An outline of the development of the civilizations of China and Japan, with emphasis on principal cultural and political themes.

40.121 (321) LATIN AMERICA, COLONIAL PERIOD (3) The political, economic, and social developments in Portuguese and Spanish America from the pre-Columbian period to the movements for independence.

40.122 (322) LATIN AMERICA, NATIONAL PERIOD (3) The struggle for political, economic and social stability, international relations and cultural patterns in the development of independent Latin America in the nineteenth and twentieth centuries.

40.145 (221) HISTORY OF THE UNITED STATES (3) Political, economic, social, and cultural forces which shaped the pattern of life in the United States from the founding of the colonies to 1865.

40.146 (222) HISTORY OF THE UNITED STATES (3) Continuation of 40.145 from 1865 to the present.

40.201 (303) SURVEY OF ENGLISH HISTORY TO 1783 (3) Evolution of the political, legal, social, economic, and cultural institutions of England and the spread of the Empire overseas. The triumph of Parliament over the monarchy and the development of individual rights of Englishmen.

40.202 (304) BRITISH HISTORY SINCE 1783 (3) Struggle against France, the Industrial Revolution, and the rise of the bourgeoisie to political control. The spread of empire, the symbolism of the Victorian era, and the evolution of democratic processes.

40.263 (121) HISTORY OF WESTERN CIVILIZATION (3) Political, economic, social, and intellectual forces which shaped the pattern of western life to the middle of the seventeenth century.

40.264 (122) HISTORY OF WESTERN CIVILIZATION (3) Continuation of 40.263 from the middle of the seventeenth century to the present.

40.299 (299) HISTORIOGRAPHY AND BIBLIOGRAPHY (3) Survey of philosophies of history; the development of history as a discipline; methods of research and writing with particular attention to sources of information. Required of majors. Prerequisite: Declaration of a history major or consent of the department chairman.

Upper Division – Undergraduate and Graduate

40.309 (309) HISTORY OF EAST ASIA UNTIL THE SEVENTEENTH CENTURY (3) The historical development of the civilizations of China, Japan, and Korea prior to the intrusion by the Western powers, with special emphasis on the evolution of the Confucian culture of China. Prerequisite: 40.110 or consent of instructor.

40.310 (310) HISTORY OF EAST ASIA SINCE 1600 (3) A study of the historical development of China, Japan and Korea in the past three centuries focusing on their respective responses to the Western World. Prerequisites: 40.110, or 40.309 or consent of instructor.

40.311 (367) HISTORY OF SOUTH ASIA TO 1750 (3) A survey of the history and culture of the Indian subcontinent from prehistoric times to the beginning of the British Raj. Prerequisite: Six credits in history or consent of instructor.

40.312 (368) HISTORY OF SOUTH ASIA SINCE 1750 (3) The history of the Indian subcontinent since 1750, stressing the rise of British power, the colonial experience, the development of nationalist movements, and the problems of statehood in present-day India, Pakistan, Ceylon and Nepal. Prerequisite: Six credits in history or consent of instructor.

40.313 (313) HISTORY OF MODERN SOUTHEAST ASIA (3) The development of Burma, Thailand, Malaysia, Indonesia, Cambodia, Vietnam and the Philippines since 1500, with emphasis on the colonial experience and development of modern nationhood. Prerequisite: Six credits in history or consent of instructor.

40.315 (458) A HISTORY OF CHINA TO 1644 (3) The beginnings of Chinese civilization and institutions, the introduction of Buddhism, the rise of Taoism and Confucianism. The evolution of Chinese art and literature, the invasions and internal dissent. Prerequisite: 40.263 and 40.264.

40.316 (459) CHINESE HISTORY SINCE 1644 (3) The rise of the Manchu dynasty, western penetration of China, the Opium Wars, Taiping Rebellion, reform and revolution. The succession of the Kuomintang and the rise of Chinese Communism. Prerequisite: 40.263 and 40.264.

40.317 (317) HISTORY OF MODERN JAPAN (3) The political, economic and cultural aspects of Japan's rapid modernization from the mid-nineteenth century and her subsequent expansion, defeat and recovery. Prerequisite: Nine hours of history to include either 40.110 or 40.310 or consent of instructor.

40.321 (321) HISTORY OF MEXICO (3) The evolution of modern Mexican civilization. Consideration of the cultural, social, religious, economic and political developments from pre-Columbian times to the present. Prerequisites: 40.121, 40.122 or 40.145, 40.146 or 40.263, 40.264 or consent of the instructor.

40.327 (327) SOCIAL AND INTELLECTUAL HISTORY OF LATIN AMERICA (3) A study of the impact of ideas on the organization of Latin American society in different epochs. Prerequisites: 40.121, 40.122 or consent of instructor.

40.333 (430) SUB-SAHARAN AFRICA (3) Selected aspects of the development of African cultures, emphasizing changing assumptions and interpretations and the contributions of other disciplines to the reconstruction of Africa's past. Prerequisite: 40.145, 40.146, 40.263, 40.264 or consent of instructor.

40.345 (345) THE AMERICAN COLONIES: 1492-1763 (3) Founding and the political, economic, and social development of the American colonies. Prerequisite: 40.145, 40.263 or consent of the instructor.

40.346 (340) THE AMERICAN REVOLUTIONARY PERIOD: 1763-1789 (3) From the end of the Seven Years' War to the ratification of the Constitution. Prerequisite: 40.145 or 40.263 or consent of the instructor.

40.347 (346) THE EARLY NATIONAL PERIOD (3) The United States from the Constitutional Convention to the Election of 1820. The Federalist Decade and the Jeffersonian Era. Prerequisite: 40.145 and 40.146.

40.348 (347) THE JACKSONIAN ERA (3) The United States from 1815 to 1845; political, social and economic currents of the period. Prerequisite: 40.145.

40.349 (348) SECTIONALISM AND THE CIVIL WAR (3) Sectionalism with emphasis upon the Old South; the coming of the war; and the political and economic issues of the Civil War years. Prerequisites: 40.145 and 40.146.

40.350 (349) RECONSTRUCTION AND THE NEW SOUTH (3) Political, economic and social developments following the Civil War. Prerequisite: 40.145 and 40.146.

40.351 (337) THE GILDED AGE (3) History of the United States from 1877 to 1892 with emphasis on the political, economic and social questions of the era. Prerequisite: 40.145 and 40.146.

40.352 (338) THE POPULIST-PROGRESSIVE ERA (3) History of the United States from 1892-1920 with emphasis on the political, economic and social questions of the era. Prerequisite: 40.145 and 40.146.

40.359, 360 (350, 351) RECENT AMERICAN HISTORY (3, 3) History of the United States from 1920 to the present. First semester to 1945; second semester since 1945. Prerequisite: 40.146.

40.361 (413) AMERICAN INTELLECTUAL HISTORY TO 1859 (3) Main issues in American thought from the colonial period to the publication of Darwin's *The Origin of Species*. Emphasis on religious thought, political theory and ideas in literature. Prerequisite: Two courses from philosophy, political theory, American literature or American history.

40.362 (414) AMERICAN INTELLECTUAL HISTORY SINCE 1859 (3) Main issues in American thought from the publication of Darwin's *The Origin of Species* to contemporary times. Emphasis on religious thought, social theory, ideas in literature and philosophy. Prerequisite: Two courses from philosophy, political theory, American literature or American history.

40.363, 364 (415, 416) SOCIAL HISTORY OF THE UNITED STATES (3, 3) History of American life from the 17th century to the present, focusing on problems relating to social structure, popular culture, religious and education institutions. First semester to 1865; second semester from 1865 to the present. Prerequisite: First semester 40.145; second semester 40.146.

40.365, 366 (333, 334) ECONOMIC HISTORY OF THE UNITED STATES (3, 3) American economic development from the colonial period to the present, with an emphasis upon trends and problems of contemporary importance. Colonial times to 1865; 1865 to present. Prerequisite: 40.145, 40.146.

40.367, 368 (402, 403) CONSTITUTIONAL HISTORY OF THE UNITED STATES (3, 3) Development of American constitutionalism in theory and practice. Prerequisite: 40.145 and 40.146.

40.369 (451) DIPLOMATIC HISTORY OF THE UNITED STATES TO 1900 (3) Evolution of the American national interest in foreign relations with Europe, Latin America, and the Far East from colonial times to 1900. Emphasis upon the changing character and role of objectives, policies, commitments and forces. Prerequisite: 40.145 and 40.146.

40.370 (452) DIPLOMATIC HISTORY OF THE UNITED STATES SINCE 1900 (3) Continuation of 40.369 to the present with added interest in the emergence of the United States as a major world power. The role of the United States in modern warfare, world wide economic and financial affairs, overseas expansion, the diplomatic impact of conflict in ideologies, and current international crisis. Prerequisite: 40.145 and 40.146.

40.371, 372 (371, 372) UNITED STATES RELIGIOUS HISTORY (3,3) The interactions between religion, society, reform and education in the American past. Emphasis on how religious ideals have shaped American institutions and character. First semester to 1865; second semester since 1865. Prerequisites: 40.145, 40.146 or consent of instructor.

40.375 (405) THE CITY IN AMERICAN HISTORY (3) The development of the city and its impact on American social, cultural, intellectual, political and economic life. Prerequisites: 30.145, 40.146 or two of the following: 34.391, 80.344, 68.305 or consent of instructor.

40.377 (407) THE IMMIGRANT IN AMERICAN HISTORY (3) History of the immigrant experience in America from the colonial period to the present. Emphasis on migration patterns, receptivity of native society, assimilation and acculturation processes. Prerequisite: 40.145 and 40.146.

40.381 (417) HISTORY OF BLACK AMERICANS (3) History of Americans of African ancestry from their West African background to the present. Emphasis on black Americans' thought, activities, organizations and their role in developing America. Prerequisite: 40.145 and 40.146.

40.391 (418) HISTORY OF CANADA (3) Canadian history with emphasis on the period since 1867. Particular attention will be given to the problems of cultural dualism and confederation. Prerequisite: 40.145, 40.146, 40.263, 40.264.

40.397 (320) HISTORY AND GEOGRAPHY OF MARYLAND (3) Political, social and economic development of the state and its relations to major events in the development of the nation. Natural resources; regional land use; industrial development, particularly in the Baltimore area. Field trips. Field trip expenses about \$15.00, payable when trips are taken. Prerequisite: 40.145 and 40.146 and 34.101, 34.102.

40.400 (420) SEMINAR IN AMERICAN HISTORY (3) Reading and research dealing with a phase of history to be selected by the instructor; considerable attention to sources and historiography. Prerequisite: 40.145, 40.146, 40.263, 40.264 and 40.299 and consent of instructor.

40.401, 402 (357, 358) MEDIEVAL CIVILIZATION (3, 3) The principal currents of political, social, intellectual and artistic developments in medieval Europe. The early middle ages to about 1050; the high middle ages — 1050 to 1350. Prerequisite: 40.263.

40.403 (362) RENAISSANCE AND REFORMATION (3) Social and intellectual changes in Western Europe between 1350 and 1650 which mark the transition from the medieval to the modern world. Prerequisite: 40.263 and 40.264.

40.405 (363) EUROPE 1648-1815 (3) European state system and expansion of European civilization; intellectual growth and class relationships culminating in the French Revolution and Napoleon. Prerequisite: 40.263 and 40.264.

40.406 (364) EUROPE 1815-1914 (3) Major economic, political, social and intellectual currents of the period. The effects of the industrial revolution, the development of nationalism and imperialism, and the origins of the first world war. Prerequisite: 40.263 and 40.264.

40.407 (463) EUROPE 1914-1939 (3) Events leading to World War I, the conflict, and the peace which followed. The rise of conflicting political ideologies and the road to World War II. Prerequisite: 40.263 and 40.264.

40.408 (464) EUROPE SINCE 1939 (3) World War II — diplomacy, strategy, and results. The economic, social and political recovery of post-war Europe and the development of new alliance structures. Prerequisite: 40.263 and 40.264.

40.413 (425) EUROPEAN MILITARY HISTORY SINCE 1815 (3) The major wars and inter-war military developments of post-Napoleonic Europe seen in the context of diplomatic, economic and technological history. Prerequisite: 40.264 or consent of instructor.

40.415 (426) DIPLOMATIC HISTORY OF EUROPE 1815-1939 (3) A survey with emphasis upon specific diplomatic crises. Prerequisite: 40.264.

40.417, 418 (328, 329) ECONOMIC HISTORY OF EUROPE (3, 3) The modern economic institutions of Western Europe. The commercial revolution; industrial revolution; the age of mass production and technology. To 1750; since 1750. Prerequisite: 40.263 and 40.264.

40.421 (470) BRITAIN IN THE TWENTIETH CENTURY (3) The role of Britain, the Commonwealth and the Empire. Social reform and World War I. Efforts to recover economic equilibrium. World War II. Decline of the Empire. Britain and Socialism. Prerequisite: 40.263 and 40.264.

40.431 (428) FRANCE: 1763-1871 (3) Old Regime and the impact of successive revolutions upon French society. Emphasis upon the role of France in the growth of European liberalism and nationalism. Prerequisite: 40.263 and 40.264.

40.441 (460) MODERN GERMANY, 1871-1945 (3) Brief topical analysis of the 19th century background. Concentration on the Bismarckian Empire, Weimar Republic and the Third Reich, emphasizing the interrelationships between internal developments and Germany's role in Europe and the world. Prerequisite: 40.264.

40.451 (423) RUSSIA TO 1917 (3) From Kiev Rus to the fall of the Romanov dynasty. Prerequisite: 40.263 and 40.264 or consent of instructor.

40.452 (424) SOVIET UNION SINCE 1917 (3) From the fall of the Tsarist regime and the Bolshevik Revolution to the present. Prerequisite: 40.263 and 40.264 or consent of instructor.

40.461 (419) SEMINAR IN EUROPEAN HISTORY (3) Reading and research dealing with a phase of history to be selected by the instructor; considerable attention to sources and historiography Prerequisite: 40.145, 40.146, 40.263, 40.264, 40.299 and consent of instructor.

40.463, 464 (433, 434) INTELLECTUAL HISTORY OF WESTERN CIVILIZATION (3, 3) Emphasis on the history of metaphysical, religious and scientific thought in the context of broad historical trends; attention also to political, economic and aesthetic philosophies. First semester, early Medieval to 1700; second semester, Enlightenment, 19th and 20th centuries. Prerequisite: 40.263 for first semester; 40.264 for second semester; or consent of instructor.

40.477 (435) MODERN WESTERN COLONIALISM (3) Expansion of Western culture and institutions with particular reference to their effects on the peoples of Asia and Africa in the period since 1870. Prerequisite: 40.263 and 40.264.

40.479 (437) A HISTORY OF DIPLOMACY (3) Evolution from its origins to the present with emphasis on the modern period. Historic changes which shifting ideologies and new technologies have wrought in the role of the diplomat. Prerequisite: 40.263 and 40.264.

40.491 (214, 215, 216, 217) BIOGRAPHICAL STUDIES IN HISTORY (3) A study of selected historical figures who have shaped or reflected the past. Figures to be selected by instructor. Prerequisite: Six hours in history.

40.494 (490) TRAVEL & STUDY (3-6) Countries and topics to be selected by the Departments and instructors sponsoring the program. For complete information, write the Chairman of the Department early in the fall of academic year preceding the summer of intended study. Prerequisite: Upper division status and consent of instructor.

40.495 (495) SEMINAR IN COMPARATIVE STUDIES (3) Reading and research in history or related disciplines approached from a viewpoint that is primarily historical and dealing with specific topics, problems, or developments selected by the instructor(s). Prerequisite: 40.299 and four additional courses in history or two courses in history and a research methods course and two additional courses in the related discipline and consent of the instructor.

40.497 (485) DIRECTED READING (2-4) Independent reading in history or related disciplines approached from a viewpoint that is primarily historical and dealing with specific periods, topics, problems or comparative developments selected by the student in consultation with the instructor(s). Prerequisites: 15 hours in history or 9 hours in history and 6 hours in the related discipline and a minimum average of 3.00 in history and the related discipline and consent of the Department Chairman.

40.499 (499) SENIOR THESIS (2-4) Research and the writing of a thesis, to be directed by a faculty member in a chosen area of specialization. Prerequisite: Admission to Departmental Honors Program.

Graduate Division

40.599 (599) SEMINAR IN UNITED STATES HISTORY TO 1865 (3) Research dealing with a phase of United States history to 1865 to be selected by the instructor. Prerequisite: Graduate standing and consent of the instructor.

40.600 (600) SEMINAR IN UNITED STATES HISTORY SINCE 1865 (3) Research dealing with a phase of United States history since 1865 to be selected by the instructor. Prerequisite: Graduate standing and consent of the instructor.

40.661 (661) SEMINAR IN 19TH CENTURY EUROPEAN HISTORY (3) Research dealing with a phase of 19th century European history to be selected by the instructor. Prerequisite: Graduate standing and consent of the instructor.

40.662 (662) SEMINAR IN 20TH CENTURY EUROPEAN HISTORY (3) Research dealing with a phase of 20th century European history to be selected by the instructor. Prerequisite: Graduate standing and consent of the instructor.

40.697 (697) DIRECTED READING IN HISTORY (2-4) Independent reading in areas of history selected by the instructor and the student. Prerequisite: Graduate standing and consent of the instructor.



INTERNATIONAL STUDIES

Coordinator: PRITAM T. MERANI

I. Purpose:

To provide an interdisciplinary system of courses which will lead to an arts and science major in international studies, with opportunities to specialize in foreign areas. The major program is designed to prepare students for graduate studies, for careers in government foreign service and other government agencies, and in commercial and industrial fields where foreign area specialists are required.

II. Organization and Administration:

The program is administered by a Committee composed of one representative from each of the following disciplines; economics, geography, history, political science and sociology. The current members of the Committee who will also serve as advisers to the students majoring in international studies are:

Eric A. Belgrad, Associate Professor of Political Science
Arnold Blumberg, Professor of History
David Firman, Professor of Geography
Abolmajd Hojjati, Professor of Sociology
Pritam T. Merani, Professor of Political Science
(Chairman of the Committee)
Henry N. Sanborn, Professor of Economics

III. Scope:

All students majoring in international studies will complete 33 credit hours of required courses (indicated under IV A) and 27 credit hours of related electives under one of the two plans listed below:

Plan A — Functional Specialization (Non-Area)

Under this plan, students will complete 27 elective credit hours of courses related to international affairs without concentration on any geographical area.

Plan B — Area Specialization

This plan is designed to focus on important world regions. Students will complete 27 credit hours in related elective courses which concern a particular nation or region.

IV. Major Requirements:**A. Required Courses for the major are as follows:**

1. *Economics* 9 credit hours
 24.101-102 Economic Principles and Problems 6 credit hours
 24.327 International Economics 3 credit hours
2. *Geography* 6 credit hours
 34.101-102 Elements of Geography 3 credit hours
 34.381 Political Geography 3 credit hours
3. *History* 6 credit hours
 40.263-264 History of Western Civilization 6 credit hours
 OR 40.145-146 History of the United States 6 credit hours
4. *Political Science* 9 credit hours
 68.303 Theory of International Politics 3 credit hours
 68.337 Comparative Governments of Foreign
 OR Powers 3 credit hours
 68.338 Comparative Governments of Foreign
 Powers 3 credit hours
 68.427 Political Theory 3 credit hours
5. *Sociology* 3 credit hours
 80.101 Introduction to Sociology 3 credit hours
 OR 80.105 - Introduction to Anthropology 3 credit hours

B. Related Electives 27 credit hours

These may be selected from any department which offers related electives, i.e., sociology, English, literature, languages, art, philosophy, etc. Such courses will be selected by students in consultations with advisers, in order to broaden and/or specialize as desired under Plans A or B.

C. Foreign Language.

A foreign language is required for the B.A. degree. Students must select one of several languages in relation to their foreign area or functional interests as determined by their advisers. A student should be prepared to demonstrate a workable reading knowledge of that language. This requirement may be met by completing the intermediate course or equivalent of a modern foreign language.

V. Transfer Students:

Transfer students must take a minimum of 18 credits of upper division courses in International Studies at Towson State to fulfill requirements for the major.



MATHEMATICS

Professors: SHERMAN, VOLPEL

Associate Professors: BECKEY (Chairman), HASTE, HORAK, ZIMMERMAN, ZIPP

Assistant Professors: CHEN, CHINN, DUSTIRA, FISCHER, HANSON, ILGENFRITZ, KAPLON, LIDTKE, RIGGLEMAN, RUTENBURGS, SMITH

Instructors: HAGELGANS, JEFFERS, NEUBERT, SWENSEN, WAGNER

The mathematics curriculum provides opportunities for students to do abstract reasoning possibly applicable to many scientific or academic areas: to survey the field of mathematics, to study the applications of the discipline, to prepare for graduate work in mathematics, to become teachers of mathematics in the elementary and secondary schools, to enter fields of industry and government requiring mathematics.

All students in the elementary education program or the early childhood education program are required to take both 50.204 and 50.205 or equivalent.

Any student submitting mathematics credits which are more than ten years old at the time the student is admitted or readmitted, may be asked, after the records are reviewed by the department chairman, to repeat the courses or to substitute new ones.

MATHEMATICS MINORS

All mathematics minors are required to take either 50.115-50.116 or 50.119 and then 50.261, 50.273 and 50.274 plus enough mathematics courses to make a total of 24 semester hours. The program of the minor should be approved by the student's mathematics department advisor. (A minor in mathematics enables a student to meet the subject-matter requirements for a Maryland Secondary School teacher's Certificate to teach mathematics.)

MATHEMATICS MAJORS, SECONDARY EDUCATION PROGRAM

All mathematics majors who plan to be teachers are required to take 50.261, 50.273, 50.274, 50.353, 50.361 plus enough mathematics courses at the 300 and 400 level to make a total of 27 semester hours in mathematics. Physics 66.211 and 66.212, or 66.221 and 66.222, are also required.

MATHEMATICS MAJORS, ARTS AND SCIENCE PROGRAM

All students in an arts and science program who major in mathematics (therefore not necessarily prospective teachers of mathematics) are required to take 50.261, 50.273, 50.274, 50.361, 50.365, 50.373, 50.473 plus enough 300 and 400 level mathematics courses to make a total of 30 semester hours in mathematics. Physics 66.211 and 66.212 or 66.221 and 66.222, are also required.

MATHEMATICS MAJORS AND MINORS

Mathematics majors or minors who receive a grade of D in a 100 level course prerequisite to calculus must repeat the course *no later than concurrent with calculus*.

Mathematics majors or minors who receive a grade of D in a 200, 300, or 400 level course prerequisite to further courses must repeat the course *prior to taking the course for which it is a prerequisite*.

MATHEMATICS COURSES (MATH)

A note on the numbering system: The first digit of the course number indicates the level of the content, the middle digit of the course number indicates the area of the content: 0-general; 1-service; 2-mathematics education; 3-probability and statistics, computer science, numerical analysis; 5-geometry; 6-algebra; 7-analysis; 9-readings, special topics, and seminars in mathematics.

Service Division

50.010 INTERMEDIATE ALGEBRA (0) Real number system, solutions of equations or inequalities in one and two variables, solutions of quadratic equations, exponents, radicals, functions, polynomial algebra, series and complex numbers. Prerequisite: One year of high school algebra.

Lower Division — Undergraduate

50.115 MATHEMATICS I (3) Real numbers and sets, equations and inequalities, functions, and logarithmic and exponential functions. Trigonometry. Prerequisites: Two years of high school algebra, or 50.010. High school geometry is highly recommended.

50.116 MATHEMATICS II (3) Complex numbers, determinants and analytic geometry of the line, plane, conics, and three-space curves. Prerequisite: 50.115.

50.119 PRE-CALCULUS (3) Elementary functions and their graphs including polynomial, exponential, logarithmic, and trigonometric functions; two and three dimensional analytic geometry. Prerequisite: Special placement examination.

50.201 ELEMENTS OF MATHEMATICS (3) Systems of numeration, logic, sets, algebraic properties of real numbers, abstract algebraic structures, probability, and geometry. Prerequisite: One year of high school algebra. (Not open to mathematics majors or Early Childhood Education or Elementary Education students.)

50.204 FUNDAMENTAL CONCEPTS OF ARITHMETIC (3) Sets, systems or numeration, principles underlying fundamental operations, and development of the number system through rational numbers. Prerequisite: One year of high school algebra. (Required of all Early Childhood Education and Elementary Education students. Satisfies mathematics requirement for these students. Not open to others.)

50.205 GENERAL COLLEGE MATHEMATICS (3) Elements of algebra and geometry, real numbers, abstract systems, logic probability and measurement. Prerequisite: 50.204 (Required of all Early Childhood Education and Elementary Education students. 50.115 may be substituted for this course. Not open to others.)

50.209 MATHEMATICS OF FINANCE (3) Compound interest and discount, amortization, sinking funds, annuities, and elements of insurance. Prerequisite: 50.115 or 50.119 or equivalent. (Credit cannot be applied toward a mathematics major.)

50.231 BASIC STATISTICS (3) Frequency distributions with emphasis on binomial and normal distribution percentiles, measures of central tendency and variability, sampling theory, test of hypothesis, regression analysis, correlations, and analysis of variance. Emphasis will be placed on practical applications of statistics. Prerequisite: 50.115 or equivalent. (Not open to mathematics majors.)

50.235 FUNDAMENTALS OF COMPUTING WITH APPLICATIONS (3) Designed for the liberal arts student. Course will cover some topics from trigonometry, solving for roots of a quadratic equation, factoring, modular arithmetic, prime numbers, random numbers, integration, Taylor's approximation, linear regression and curve plotting. Prerequisite: Two years high school algebra or 50.110. 3 credits. (No credit toward a mathematics major.)

50.251 GRAPH THEORY (3) Theory and application of graph theory, Eulerian and Hamiltonian graphs, line graphs, coloring problems, or other selected topics. Prerequisite: 4 years of high school math or any other math course in college, or permission of instructor.

50.261 FUNDAMENTALS OF MATHEMATICS (3) Elementary logic, the natural numbers, development of integers rationals and reals, introduction to algebraic systems. Prerequisite: 50.116 or consent of instructor.

50.271 CALCULUS I (3) Functions, limits and continuity, differentiation of algebraic functions, maxima and minima, mean value theorem, antiderivatives integration, and applications. Prerequisite: 50.116 or 50.119 or special placement examination. Will not be offered after Summer 1970.)

50.272 CALCULUS II (3) Definite and indefinite integrals, sequences, differentiation and integration of transcendental functions, formal techniques of integration, and applications. Prerequisite: 50.271 (Not to be offered after fall term, 1970.)

50.273 CALCULUS I (4) Functions, limits and continuity; introduction to sequences; differentiation of algebraic, inverse and transcendental functions; mean value theorem; applications. Prerequisite: 50.116, or 50.119, or equivalent.

50.274 CALCULUS II (4) Definite and indefinite integrals, formal integration and applications; indeterminate forms; sequences and series of numbers, and power series. Prerequisite: 50.273

Upper Division — Undergraduate And Graduate

Upper division courses not marked with an asterisk may be submitted for mathematics credit to the graduate school for the master's degree in education provided they have not been submitted for undergraduate credit.

*50.321 TEACHING MATHEMATICS IN EARLY CHILDHOOD EDUCATION (2) Materials of instruction and methods of presentation with emphasis on the discovery approach. Prerequisites: 50.204 and 50.205. No credit toward math major or minor.

*50.323 TEACHING MATHEMATICS IN ELEMENTARY SCHOOL (2 or 3) Nature of instruction. Organization of units of instruction. Provisions for developing understandings. New programs and research findings. Techniques of evaluation. Required of all Elementary Education Majors. Prerequisite: 50.204 and 50.205. No credit toward math major or minor.

50.331 PROBABILITY (3) Probability in sample spaces, discrete and continuous random variables, distribution theory, Tchebyshev's theorem, central limit theorem, expected values, and moments. Prerequisite: 50.272 or 50.274, which courses may be taken concurrently.

50.332 MATHEMATICAL STATISTICS (3) Sample theory and distributions, point estimation, confidence intervals, tests of hypotheses, regression, correlation, and analysis of variance. Prerequisite: 50.331.

*50.337 COMPUTER PROGRAMMING (3) Fortran IV language with applied problems using the computer. Prerequisite: 50.115, or 50.119, or equivalent. (Credit cannot be applied toward a mathematics major.)

50.338 INTRODUCTION TO COMPUTER SCIENCE (3) Selected topics from the following: history and background of computing; computer characteristics, organization and logic, the concept and properties of algorithms, addressing schemes, numerical and non-numerical applications, and a survey of computer language and systems. Prerequisite: 50.337 and the consent of the instructor.

*50.351 ELEMENTS OF GEOMETRY (3) New concepts in geometry with new definitions, vocabulary, and techniques. Construction and scale drawings, and review of computations in mensuration. Prerequisite: 50.205. (Not open to mathematics majors.)

*50.353 ELEMENTARY GEOMETRY FROM AN ADVANCED STANDPOINT (3) Plane and space geometry, advanced Euclidean geometry, hyperbolic geometry, postulational methods, isometries, geometric inequalities and incidence theorems. Prerequisite: 50.261 and 50.271 or 50.273 (Credit cannot be applied toward a mathematics major for Arts and Science students.)

50.357 COLLEGE GEOMETRY (3) Advanced Euclidean geometry including loci, pedal triangles, harmonic ranges, quadrangles, cyclic quadrilaterals, poles and polars, and inversion. Prerequisite: 50.261, and 50.271 or 50.273.

50.361 ALGEBRAIC STRUCTURES (3) Groups, rings, fields, integral domains, polynomial rings, Peano axioms, and development of the real number systems. Prerequisite: 50.261.

50.365 LINEAR ALGEBRA (3) Matrices, vector spaces, determinants, systems of linear equations, linear transformations, characteristic vectors and values, canonical forms. Prerequisite: 50.361

50.367 THEORY OF NUMBERS (3) Theory of prime numbers, the division algorithm, the Fundamental Theorem of Arithmetic, polynomials, congruences, number theoretic functions. Prerequisite: 50.261.

50.371 CALCULUS III (3) Indeterminate forms, infinite series, vector calculus of functions of one variable differential calculus of functions of several variables. Prerequisite: 50.272 (Not to be offered after Spring terms 1971.)

50.372 CALCULUS IV (3) Vector differential calculus, multiple integration, vector integral calculus. Selected topics from among Fourier series, Laplace transforms, special functions, and differential equations. Prerequisite: 50.371. (Not to be offered after Spring term 1971.)

50.373 CALCULUS III (4) Differential and integral calculus of functions of several variables; differential and integral calculus of vector valued functions, including the divergence and Stoke's theorems; selected topics from among Fourier series, Laplace transform, special functions and differential equations. Prerequisite: 50.274.

50.421 MATHEMATICS EDUCATION FOR IN-SERVICE ELEMENTARY SCHOOL TEACHERS (1-4) Selected topics in the teaching of elementary school mathematics. (Open only to in-service personnel in elementary education who have not had 50.204 or 50.205 or equivalent within the last 5 years.) Graduate credit only with prior approval of advisor.

*50.423 TEACHING MATHEMATICS IN SECONDARY SCHOOLS (2) Aims and purposes of mathematics instructions, examination of courses of study and textbooks, study of conceptual approaches. Open only to students in the student teaching block. Prerequisite: 50.353 and 50.361. (No credit towards mathematics major or minor.)

50.427 READINGS IN MATHEMATICS EDUCATION FOR THE ELEMENTARY SCHOOL TEACHER (1-3) Directed study for the teacher of elementary school mathematics. Prerequisites: 50.321 or 50.323 and approval of instructor.

50.429 READINGS IN MATHEMATICS EDUCATION FOR THE SECONDARY SCHOOL TEACHER (TBA) Directed study for the teacher of secondary school mathematics. Prerequisite: approval of instructor. (No credit toward mathematics major for Arts and Science students.)

50.435 NUMERICAL ANALYSIS I (3) Error analysis, interpolations, numerical solution of algebraic equations and systems of algebraic equations, numerical integration and differentiation. Illustration and use of computer languages. Prerequisite: 50.371 or 50.274.

50.436 NUMERICAL ANALYSIS II (3) Continuation of 50.435. Prerequisite: 50.435.

50.451 MATH RESEARCH IN GRAPH THEORY (3) A course designed to give an advanced mathematics major the opportunity to do independent, significant research in a field of mathematics through Graph Theory. (Topics will include Hamiltonian and Eulerian graphs, coloring graphs, planar and non-planar graphs, connectivity problems and isomorphic graphs.) Prerequisites: approval of instructor.

50.457 DIFFERENTIAL GEOMETRY I (3) Curvatures of curves and surfaces in E_3 , geodesics, invariants, mappings and special surfaces. Prerequisite: 50.371 or 50.373.

50.458 DIFFERENTIAL GEOMETRY II (3) Continuation of 50.457. Prerequisite: 50.457.

50.461 ADVANCED TOPICS IN ALGEBRA (3) Extension of the concepts of 50.361. Prerequisite: 50.361.

50.471 DIFFERENTIAL EQUATIONS (3) Solutions of ordinary and partial differential equations. Prerequisite: 50.371 or 50.274.

50.473 ADVANCED CALCULUS I (3) Euclidean spaces, norms, compact and connected sets in metric spaces, Heine-Borel theorem, Weierstrass Theorem, numerical sequences and series, continuity and uniform continuity. Prerequisite: 50.371 or 50.261 and 50.274.

50.474 ADVANCED CALCULUS II (3) Differentiation, mean value theorem, differentiation of vector-valued functions, Riemann-Stieltjes Integral, sequences and series of functions, Stone-Weierstrass Theorem, and functions of several variables. Prerequisite: 50.473.

50.477 TOPOLOGY (3) General topological spaces, limits, continuity, separation axioms, Hausdorff regular and compact spaces, distance functions, and metric spaces. Prerequisite: 50.473.

50.491 READINGS IN MATHEMATICS (TBA) Independent reading in selected areas of mathematics. Prerequisite: consent of instructor. (Open only to seniors.)

Graduate Division

50.521 SEMINAR IN TEACHING ARITHMETIC (3) Analysis of new topics, techniques, and materials in arithmetic instruction. Prerequisite: 50.321 or 50.323. (No credit toward mathematics major or minor.)

MODERN LANGUAGES

Professors: MAGILL (Chairman), VIDAL-LLECHA

Assistant Professors: CACOSSA, EVANS, GIRO, HAUPT, McDERMOTT, SABIN, SHEETS

Instructors: LEVNO, POIRIER, RIEDNER

Visiting Lecturer: TAILLEFER

The purposes of the Modern Language Department are to offer language electives to all students of the college, to offer the requirements for the teaching of a modern foreign language, and to offer a major or minor in French, German, and Spanish to students interested in acquiring reading comprehension and ability to converse with intelligibility in one or more of these languages. Russian and Italian courses are offered on the lower levels and will be expanded as required by interest.

LANGUAGE MAJOR

A major consists of a minimum of 24 credit hours beyond the intermediate level in the major language, of which no more than half may be transferred from other colleges and which must include at least 12 hours at the 400 level. Teacher Education candidates should note that the Advanced Grammar course is to be taken before they do their practice teaching. Students with home or family background in the language studied will have their programs, as described below, modified according to their proficiency in the language. Majors in each of the languages now offered consist of the following:

French: Intermediate level or the equivalent; and FREN 32-301, 302; 321, 322; at least 12 hours of credits in other French courses on the 400 level.

German: Intermediate level or the equivalent; and GERM 36.301, 302; 321, 322; at least 12 hours of credits in the German courses on the 400 level.

Spanish: Intermediate level or the equivalent; and SPAN 82.301, 302; 321, 322; at least 12 hours of credits in other Spanish courses on the 400 level.

LANGUAGE MINOR

A minor consists of the teaching certificate requirement of the Maryland State Department of Education. These are either (a) 24 hours of college credit in the particular language, or (b) 18 hours if two or more years were absolved in a secondary school after the ninth grade. In addition, Education 26.397 is required of teacher candidates.

POLICIES CONCERNING LANGUAGE

The second semester of an elementary or intermediate language course must be completed successfully before credit is granted for the first semester's work.

The completion of the intermediate level, or its equivalent, is required of all candidates for the Bachelor of Arts degree. This requirement may be met by (a) completing two or more years of the language in high school plus the intermediate level course in college, (b) completing the elementary and intermediate level course in the language in college, (c) successfully completing an equivalence examination administered by the Language Department at Towson State College or successfully completing one semester of any course beyond the intermediate level.

Students who present two or more years of a language from high school and wish to continue in that language are normally placed in the intermediate course in college, since the college elementary course would be a repetition of the work already taken in high school; these students may not receive college credit for the elementary course without permission from the department. Qualified students may enroll in the advanced courses (300 level) as a result of placement tests. These placement tests, administered by the Towson State College Language Department, should be taken prior to the student's first registration in the college.

FRENCH COURSES (FREN)

Lower Division – Undergraduate

32.101, 102 (101, 102) FRENCH: ELEMENTS (3,3) A thorough foundation of grammar; drills in pronunciation; elementary conversation; composition and translation.

32.201, 202 (201, 202) FRENCH: INTERMEDIATE (3,3) Review of grammar; conversation and prose composition; translation of texts of cultural value; outside readings. Prerequisite: 32.101-32.102 or equivalent. Conducted in French.

Upper Division – Undergraduate Only

32.301, 302 (32.303, 304) COMPOSITION AND CONVERSATION (3,3) Conversation and composition beyond intermediate level. Prerequisite: 32.201-32.202 or equivalent. Conducted in French.

32.311 (32.321) FRENCH CULTURE AND CIVILIZATION (3) A brief survey of the history, geography, and institutions of France. Prerequisite: 32.201-32.202 or equivalent. Conducted in French.

32.321, 322 (32.301, 302) SURVEY OF FRENCH LITERATURE (3,3) French literature from Chanson de Roland to the present. Prerequisite: 32.201-202 or equivalent. Conducted in French.

32.391 (32.401) ADVANCED FRENCH GRAMMAR (3) French syntax, idiomatic construction, word formation. Conversation and oral drill. Prerequisite: 32.301, 32.302. Conducted in French.

Upper Division – Undergraduate and Graduate

32.325 (32.307) MASTERPIECES OF FRENCH LITERATURE IN TRANSLATION (3) An intensive study of English translations of a limited selection of works chosen from the acknowledged masterpieces of French literature, presented in chronological order (not open to French majors). Prerequisite: English 30.102.

32.395 FRENCH PHONETICS (2) The pronunciation of contemporary French; drill in pronunciation. Prerequisite: completion of Intermediate French 32.201, 202.

32.411 FRENCH LITERATURE OF THE MIDDLE AGES (3) Selections from the major works of the period from the 12th through the 15th centuries in Modern French Versions. Prerequisite: 32.321-322. Conducted in French.

32.415 (32.405) FRENCH LITERATURE OF THE SIXTEENTH CENTURY (3) Principle works of the major writers of the sixteenth century with special attention to Rabelais, the Pleiade, and Montaigne. Prerequisite: 32.321, 322 or equivalent. Conducted in French.

32.421 (32.407) FRENCH LITERATURE OF THE SEVENTEENTH CENTURY (3) Principal works of the major writers in poetry, drama, philosophy, criticism, and the novel, to about 1660. Prerequisite: 32.321, 32.322 or equivalent. Conducted in French.

32.422 (32.408) FRENCH LITERATURE OF THE SEVENTEENTH CENTURY (3) Continuation of French 32.421 from 1660 to 1700. Prerequisite: 32.321, 32.322 or equivalent. Conducted in French.

32.425 (32.409) FRENCH LITERATURE OF THE EIGHTEENTH CENTURY (3) Principal works of the major writers with the concurrent literary and philosophical trends. Prerequisite: 32.321, 322 or equivalent. Conducted in French.

32.431 (32.411) FRENCH LITERATURE OF THE NINETEENTH CENTURY (3) The rise, flowering, and decline of Romanticism, with the contemporary writers outside the movement. Prerequisite: 32.321, 32.322 or equivalent. Conducted in French.

32.432 (32.412) FRENCH LITERATURE OF THE NINETEENTH CENTURY (3) The major literary figures and doctrines of the latter part of the nineteenth century. Prerequisite: 32.321, 32.322 or equivalent. Conducted in French.

32.441 (32.413) FRENCH LITERATURE OF THE TWENTIETH CENTURY (3) From Gide, Proust, Valery, Peguy, and Claudel to the Second World War. Prerequisite: 32.321, 32.322 or equivalent. Conducted in French.

32.442 (32.414) FRENCH LITERATURE OF THE TWENTIETH CENTURY (3) Sartre, Camus, Anouilh, and other present-day writers. Prerequisite: 32.321, 32.322 or equivalent. Conducted in French.

32.451-452 (32.425-426) FRENCH POETRY (3,3) The development of French poetry from the Middle Ages to the present day. Conducted in French. Prerequisite: 32.321, 32.322.

32.461-462 (32.421-422) FRENCH DRAMA (3,3) The development of French Drama from the Middle Ages to the present day. Conducted in French. Prerequisite: 32.321, 32.322.

32.471 THE FRENCH NOVEL (3) From the 17th century to Flaubert (theory of the novel as a genre, the novel from *Préciosité* to "la Princesse de Clèves" in the 17th century, the picaresque and philosophical novel in the 18th century, Balzac and Stendhal in the 19th century). Prerequisite: 32.321, 32.322 or equivalent. Conducted in French.

32.472 THE FRENCH NOVEL (3) From Flaubert to the "Nouveau Roman" (évolution of the Novel from Flaubert to Proust, Gide, Malraux, Giono and the theories of the "Nouveau Roman," Robbe-Grillet and Butor.) Prerequisite: 32.321, 32.322 or equivalent. Conducted in French.

32.481 (32.427) THE CONTE (3) Emphasis on the realists and some of the more recent authors. Prerequisite: 32.321, 32.322 or equivalent. Conducted in French.

32.491 (32.451) DIRECTED READING IN FRENCH LITERATURE (3) Reserved for superior students under the guidance of a departmental advisor. Prerequisite: at least three hours of literature study at the 400 level. Conducted in French.

32.492 (32.452) DIRECTED READING IN FRENCH (3) Similar to 32.491 with concentration on a different subject matter. Prerequisite: at least three hours of literature study at the 400 level. Conducted in French.

32.495-496 HONORS SEMINAR (3,3) Discussion of a central topic to be determined by the department, with independent work by the students. Required of all students in the Honors Program. Prerequisite: 32.491, 32.492. Conducted in French.

32.498-499 (32.498-499) SENIOR THESIS IN FRENCH (2,2) Research and writing of a Thesis, to be directed by a departmental advisor. Oral defense of the Thesis before a committee of members of the department and at least one outside examiner. Credit for 32.497 not awarded until 32.498 is successfully completed. Prerequisite: 32.495, 32.496. Conducted in French.

Graduate Division

32.501 (32.495) INTRINSIC PROBLEMS IN FRENCH LITERATURE (3) Consideration of the literary work "in itself": matters of literary language and world-view; the possibilities and limitations of this sort of criticism; problems in bibliography. Prerequisite: 32.491 and consent of the instructor. Conducted in French.

32.502 (32.496) EXTRINSIC PROBLEMS IN FRENCH LITERATURE (3) Consideration of the literary work as influenced by its cultural environment; the possibilities and limitations of this sort of criticism; problems in bibliography. Prerequisite: 32.491 and consent of the instructor. Conducted in French.

32.555-556 FRENCH REALISM AND NATURALISM (3,3) The main works of Balzac, Stendhal, Flaubert, Les Goncourt, Zola, Maupassant and Daudet with shifting emphasis from year to year. Prerequisite: Permission of instructor. Conducted in French.

GERMAN COURSES (GERM)

Lower Division — Undergraduate

36.101-102 (101-102) GERMAN ELEMENTS (3,3) Thorough foundation in grammar; drills in pronunciation; elementary conversation; composition and translation.

36.201-202 (201-202) GERMAN: INTERMEDIATE (3,3) Review of grammar; conversation and prose composition; reading of texts of cultural value. Prerequisite: 36.101-36.102 or equivalent. Conducted in German.

Upper Division — Undergraduate Only

36.301-302 (36.303-304) COMPOSITION AND CONVERSATION (3,3) Composition and conversation beyond intermediate level. Prerequisite: 36.201-202 or equivalent. Conducted in German.

36.311 CULTURE AND CIVILIZATION (3) A brief survey of the history, geography, and institutions of Germany Prerequisite: 36.201-202 or equivalent. Conducted in German.

36.321-322 (36.301-302) SURVEY OF GERMAN LITERATURE (3,3) German literature from the *Hildebrandslied* to the present. Prerequisite: 36.201-202 or equivalent. Conducted in German.

36.391 (36.401) ADVANCED GERMAN GRAMMAR (3) German syntax, idiomatic construction, word formation, original composition. Conversation and oral drill. Prerequisite: 36.301-302. Conducted in German.

Upper Division – Undergraduate and Graduate

36.325 (36.307) MASTERPIECES OF GERMAN LITERATURE IN TRANSLATION (3) An intensive study of English translations of a number of acknowledged masterpieces of German literature. Not open to German majors. Prerequisite: English 30.102.

36.411 (36.407) MEDIEVAL GERMAN LITERATURE (3) Special emphasis on the flowering period of epic and lyric poetry. Readings are in New High German translation. Prerequisite: 36.321-322 or equivalent. Conducted in German.

36.421 (36.409) HUMANISM, REFORMATION AND THE BAROQUE (3) A survey of the philosophy and literature from the end of the Middle Ages to 1750. Prerequisite: 36.321-322 or equivalent. Conducted in German.

36.425 (36.411) PRE-CLASSICISM (3) German literature from the end of the Baroque to the beginnings of Classicism. Focus on the *Aufklärung* and *Sturm und Drang*. Prerequisite: 36.321-322 or equivalent. Conducted in German.

36.427-428 (36.413-414) CLASSICISM (3,3) First semester: the beginnings of German classicism: Goethe, Schiller, Lessing; second semester: the later works of Goethe and Schiller. Prerequisite: 36.321-322 or equivalent. Conducted in German.

36.431 (36.415) ROMANTICISM (3) German literature during the Romantic era (1790-1830). Hölderlin, Novalis, Tieck, Brentano, Grillparzer. Prerequisite: 36.321-322 or equivalent. Conducted in German.

36.432 (36.417) REALISM (3) A study of German literary realism from the *Vormärz* through Poetic Realism. Heine, Büchner, Hebbel, Wagner, Keller, Fontane. Prerequisite: 36.321-322 or equivalent. Conducted in German.

36.441 (36.423) MODERN GERMAN LITERATURE (3) The modern masters: Kafka, Mann, Hesse, Rilke, Brecht. Prerequisite: 36.321-322 or equivalent. Conducted in German.

36.442 (36.424) GERMAN LITERATURE SINCE 1945 (3) Themes and movements since World War II. Poetry: Eich, Enzensberger, Celan, Bachmann; prose fiction: Böll, Grass; drama: Borchert, Dürrenmatt, Frisch. Prerequisite: 36.321-322 or equivalent. Conducted in German.

36.451 (36.425) STUDIES IN THE GERMAN LYRIC (3) Focus on a particular period, movement or author, to be determined after consultation with majors. Prerequisite: 36.321-322 or equivalent. Conducted in German.

36.461 GERMAN DRAMA OF THE 19th AND 20th CENTURIES (3) The development of modern German drama in the successive literary movements, beginning with Kleist. Prerequisite: 36.321-322 or equivalent. Conducted in German.

36.465 (36.441) GOETHE'S FAUST (3) A study of the background, themes and structures of this masterpiece. Prerequisite: 36.321-322 or equivalent. Conducted in German.

36.471 (36.429) THE GERMAN NOVEL (3) A study of the origins and development of the genre in German literature. Prerequisite: 36.321-322 or equivalent. Conducted in German.

36.481 THE GERMAN NOVELLE (3) The theory and development of the *Novelle* in German literature from Goethe to the present. Prerequisite: 36.321-322 or equivalent. Conducted in German.

36.491-492 (36.451-452) DIRECTED READINGS IN GERMAN LITERATURE (3,3) Reserved for superior students under the guidance of a departmental advisor. Content related to student's previous program. Prerequisite: at least three hours of study at the 400 level.

36.495-496 HONORS SEMINAR (3,3) Discussion of a central topic to be determined by the department, with independent work by the students. Required of all students in the Honors Program. Conducted in German. Prerequisite: 36.491 or 36.492.

36.498-499 (36.499) SENIOR THESIS IN GERMAN (2,2) Research and writing of a Thesis, to be directed by a departmental advisor. Oral defense of the Thesis before a committee of members of the department and at least one outside examiner. Credit for 36.497 not awarded until 36.498 is successfully completed. Prerequisite: 36.495, 36.496. Conducted in German.

ITALIAN COURSES (ITAL)

Lower Division — Undergraduate

46.101-102 (101-102) ITALIAN ELEMENTS (3,3) Through foundation in grammar; drills in pronunciation; elementary conversation; composition and translation.

46.201-202 (201-202) ITALIAN: INTERMEDIATE (3,3) Review of grammar conversation and prose composition; translation of texts of cultural value; outside readings. Prerequisite: 46.101-102 or equivalent.

RUSSIAN COURSES (RUSS)

Lower Division — Undergraduate

74.101-102 (101-102) RUSSIAN ELEMENTS (3,3) A thorough foundation of grammar; drills in pronunciation; elementary conversation; composition and translation.

74.201-202 (201-202) RUSSIAN INTERMEDIATE (3,3) Review of grammar; conversation and prose composition; translation of texts of cultural value; outside readings. Prerequisites: 74.101-102 or equivalent.

SPANISH COURSES (SPAN)

Lower Division — Undergraduate

82.101-102 (101-102) SPANISH ELEMENTS (3,3) Thorough foundation in grammar; drills in pronunciation; elementary conversation; composition and translation.

82.201-202 (201-202) SPANISH: INTERMEDIATE (3,3) Review of grammar; conversation and prose composition; translation of texts of cultural value; outside readings commensurate with the ability of the individual student. Prerequisite: 82.101 and 82.102 or equivalent. Conducted in Spanish.

Upper Division — Undergraduate Only

82.301-302 (82.303-304) COMPOSITION AND CONVERSATION (3,3) Composition and conversation beyond intermediate level. Prerequisite: 82.201-202 or equivalent. Conducted in Spanish.

82.311 (82.321) CULTURE AND CIVILIZATION OF THE SPANISH-SPEAKING PEOPLES (3) Value-system and way of life as embedded in the language, history, arts, and customs of Spain. Prerequisite: 82.301, 82.302 or equivalent. Conducted in Spanish.

82.312 (82.322) CULTURE AND CIVILIZATION OF THE SPANISH-SPEAKING PEOPLES (3) Value-system and way of life as embedded in the language, history, arts, customs of Ibero-America. Prerequisite: 82.301, 82.302 or equivalent.

82.321-322 (82.301-302) SURVEY OF SPANISH LITERATURE (3,3) Spanish and Spanish-American literature, with collateral readings. Prerequisite: 82.201-82.202 or equivalent. Conducted in Spanish.

82.325 (82.307) MASTERPIECES OF SPANISH LITERATURE IN TRANSLATION (3) An intensive study of English translations of a limited selection of works chosen from the acknowledged masterpieces of Spanish literature, presented in chronological order (not open to Spanish majors). Prerequisite: English: 30.102.

82.391 (82.401) ADVANCED SPANISH GRAMMAR (3) Spanish syntax, idiomatic construction, word formation, original composition. Conversation and oral drill. Prerequisite: 82.301, 82.302. Conducted in Spanish.

Upper Division — Undergraduate and Graduate

82.417-418 (82.405) THE GOLDEN AGE IN SPANISH LITERATURE (3,3) Principal attention to Cervantes, Tirso de Molina, Lope de Vega, and Ruiz de Alarcon; Gongora and his role. Prerequisite: 82.321-322 or equivalent. Conducted in Spanish.

82.431 (82.411) NINETEENTH CENTURY SPANISH LITERATURE (3) The main literary movements of the century: neo-classicism, romanticism, realism, naturalism, and special emphasis on "cubismo." Prerequisite: 82.321-322 or equivalent. Conducted in Spanish.

82.435 NINETEENTH CENTURY SPANISH AMERICAN LITERATURE (3) Principal works of the major writers to about 1860. Prerequisite: 82.321, 82.322 or equivalent. Conducted in Spanish.

82.436 NINETEENTH CENTURY SPANISH AMERICAN LITERATURE (3) Principal works of the major writers from 1860 to 1900. Prerequisite: 82.321, 82.322 or equivalent. Conducted in Spanish.

82.441 TWENTIETH CENTURY SPANISH LITERATURE (3) Special attention to the literary movement called "The Generation of '98." Prerequisite: 82.321, 82.322 or equivalent. Conducted in Spanish. (82.413)

82.442 (82.414) TWENTIETH CENTURY SPANISH LITERATURE (3) The writers of the last thirty years. Prerequisite: 82.321, 82.322 or equivalent. Conducted in Spanish.

82.443 TWENTIETH CENTURY SPANISH AMERICAN LITERATURE (3) Modernism to the Contemporary Period. Prerequisite: 82.321, 82.322 or equivalent. Conducted in Spanish.

82.444 TWENTIETH CENTURY SPANISH AMERICAN LITERATURE (3) The Contemporary Period. Prerequisite: 82.321, 82.322 or equivalent. Conducted in Spanish.

82.451 (82.425) SPANISH POETRY (3) Special emphasis on Gustavo Adolfo Becquer, Ruben Dario Antonio Machado. Prerequisite: 82.321, 82.322 or equivalent. Conducted in Spanish.

82.452 (82.426) SPANISH POETRY (3) Emphasis on the poets of the generation of 1927: Pablo Neruda, and Vincente Aleixandre. Prerequisite: 82.321, 82.322 or equivalent. Conducted in Spanish.

82.461 (82.421) SPANISH DRAMA (3) Nineteenth and early twentieth century. Prerequisite: 82.321, 82.322 or equivalent. Conducted in Spanish.

82.462 (82.442) SPANISH DRAMA (3) Contemporary playwrights such as Casona, Usigüí, and Vallejo. Prerequisite: 82.321, 82.322 or equivalent. Conducted in Spanish.

82.471 (82.423) SPANISH NOVEL (3) Emphasis will be given to Benito Perez Galdos and Pio Baroja. Prerequisite: 82.321, 82.322 or equivalent. Conducted in Spanish.

82.472 (82.424) SPANISH NOVEL (3) Emphasis on contemporary writers including; Camilo Jose Cela, Miguel Angel Asturias, Ramon Sender, Juan Goytisolo. Prerequisite: 82.321, 82.322 or equivalent. Conducted in Spanish.

82.481 (82.427) SPANISH SHORT STORY (3) The short story in Spain and Spanish America with emphasis on twentieth century authors. Prerequisite: 82.321, 82.322 or equivalent. Conducted in Spanish.

82.491 (82.451) DIRECTED READING IN SPANISH LITERATURE (3) Reserved for superior students under the guidance of a departmental adviser. Prerequisite: At least three hours of literature study at the 400 level. Conducted in Spanish.

82.492 (82.452) DIRECTED READING IN SPANISH (3) Similar to Span 491 with concentration on a different subject matter. Prerequisite: At least three hours of literature study at the 400 level. Conducted in Spanish.

82.495-496 HONORS SEMINAR (3,3) Discussion of a central topic to be determined by the department, with independent work by the students. Required of all students in the Honors Program. Conducted in Spanish. Prerequisite: 82.491 or 82.492.

82.498-499 (82.499) SENIOR THESIS IN SPANISH (2,2) Research and writing of a thesis, to be directed by a departmental advisor. Oral defense of the thesis before a committee of members of the department and at least one outside examiner. Credit for 82.497 not awarded until 82.498 is successfully completed. Prerequisite: 36.495, 36.496. Conducted in Spanish.

Graduate Division

82.501 (82.495) INTRINSIC PROBLEMS IN SPANISH LITERATURE (3) Consideration of the literary work "in itself": matters of literary language and world-view; the possibilities and limitations of this sort of criticism; problems in bibliography. Prerequisite: 82.491 and consent of the instructor. Conducted in Spanish.

82.502 (82.496) EXTRINSIC PROBLEMS IN SPANISH LITERATURE (3) Consideration of the literary work as influenced by its cultural environment; the possibilities and limitations of this sort of criticism; problems in bibliography. Prerequisite: 491 and consent of the instructor. Conducted in Spanish.



MUSIC

Professor: BRUNGARDT (Chairman)

Associate Professors: ALPER, ARRINGTON, COULANGE, DURO, MYERS

Assistant Professors: CRAWFORD, DRUCKER, GRISWALD, RAUSCHENBERG, REYES, RICHARDSON, TERWILLIGER

Instructors: BUSEN, GILLERAN, HOFFMAN, HUESMAN, LANGSAM, LEVY, MELICK, MIDDLEBROOKS, MOORE, OLSON, PALANKER, STOUT, TAN
The Music Department serves both music majors and general students.

For the non-major, or general student, the purposes are to give opportunities for enrichment of cultural background and creative expression; for the music major, the purposes are to give professional training so that he will attain a high standard of artistic performance, be prepared to teach, and be qualified in his chosen field. Ample opportunity is given for student participation in musical organizations and ensembles, provides valuable experience, and thus contributing to the cultural life of the College and the Community.

Non-Majors may elect any music courses for which they have the prerequisites. Private lessons in music and participation in musical organizations are open to all interested students. There is an additional fee for private lessons and registration for applied music must be made with the consent of the Music Department Chairman.

MUSIC MAJOR

Students wishing to major in music or music education should write to the Chairman of the Music Department at the time they make application to Towson State College through the Director of Admissions.

A placement examination in performance will be given prospective applicants in the semester preceding their college admission. The purpose of this examination is to aid the Music Department in determining the most satisfactory curriculum pattern for the individual student.

Each music and music education major is required to choose a primary instrument, and study with teachers provided by, or approved by, Towson State College. Every music major will perform on his primary instrument before a faculty jury at the end of each semester of private study.

The Department of Music and Music Education offers the following two courses of study:

- I. A course of study preparing students to teach music as specialists, leading to a Bachelor of Science Degree in Music Education. Requirements:
 - a. General Education Requirements for all students.
 - b. Professional course requirements — 28.319, Survey of Educational Programs, 27.401, Foundations of Education, 26.397, Student Teaching in Elementary School Music, Psychology 70.203, Educational Psychology, Music Education 54.345, Teaching Music in the Elementary Schools, 54.349, Teaching Music in the Secondary School, 27.398, Student Teaching in Secondary School Music.
 - c. Music course requirements — These will include the following areas: Private lessons, Performance Groups, Music Theory, Arranging, Conducting, Instrumental and Vocal classes, Music History/ Literature, and Organization and Administration of Music Education. The piano requirements may be met by taking two semesters of Piano Class or by passing a piano proficiency examination.
- II. A course of study in the field of arts and sciences leading to a Bachelor of Arts degree with emphasis in performance, Music Theory, or Music Literature. The Bachelor of Arts degree in music is a program designed for the study of music within a liberal arts curriculum with a broad coverage of the field. The burden of study should be upon the literature of music designed to develop basic musicianship, the ability to perform the literature well, and provided a set of principles and terms that lead to a fuller intellectual grasp of the art. It means to give an appropriate background for prospective candidates for advanced degrees who are preparing for such careers as musicology, composing and performance.

Requirements:

 - a. General Education Requirements for all students.
 - b. Foreign languages requirements.
 - c. Music course requirements — These will include the following areas: Performance Groups, Private Lessons, Arranging, Conducting, Music History/Literature, Music Theory, The piano requirements may be met by taking two semesters of Piano Class or by passing the piano proficiency examination.
 - d. For the degree with emphasis in Performance: A full recital.
 - e. For the degree with emphasis in Music Literature: A research paper.

Suggested course of study leading to the Bachelor of Science in Music Education, Instrumental major:

INSTRUMENTAL MAJOR

(includes all instruments except keyboard, guitar, and voice)

Freshman Year

1st Semester		2nd Semester	
Music Theory (& Lab)	4	Music Theory (& Lab)	4
Piano Class	1	Piano Class	1
Voice Class	1	Private Lessons	1
Private Lessons	1	Music Organization	1
Music Organization	1	Intro. to Music Lit.	3 Gp. I
English	3 Gp. I	General Ed. Req.	2 Gp. I
General Ed. Req.	1 Gp. IV	English	3 Gp. I
General Psychology (Req.)	3 Gp. II	General Ed. Req.	1 Gp. IV
	<u>15</u>		<u>16</u>

Sophomore Year

1st Semester		2nd Semester	
Music Theory	4	Music Theory	4
Brass Class	1	Brass Class	1
String Class	1	String Class	1
Music Organization	1	Music Organization	1
Private Lessons	1	Private Lessons	1
Educational Psychology	3	General Ed. Req.	2 Gp. I
General Ed. Req.	3 Gp. I	General Ed. Req.	3 Gp. III
General Ed. Req.	3 Gp. III	General Ed. Req.	3 Gp. III
	<u>17</u>		<u>16</u>

Junior Year

1st Semester		2nd Semester	
History of Music	3	History of Music	3
Percussion Class	1	Percussion Class	1
Woodwind Class	1	Woodwind Class	1
Music Organization	1	Instrumental Cond.	3
Private Lessons	1	Music Organization	1
General Ed. Req.	4 Gp. II	Private Lessons	1
Survey of Ed.	3	Music in Elem. Sch.	3
General Ed. Req.	3 Gp. II	General Ed. Req.	3 Gp. III
	<u>17</u>		<u>16</u>

Senior Year

1st Semester		2nd Semester	
Choral and Instr. Arr.	3	Student teaching in the Elem. Sch.	6
Music Organization	1	Student teaching in the Sec. Sch.	6
Private Lessons	1	Music in the Sec. Sch.	3
Org. & Adm. of Music Ed.	3		<u>15</u>
Form and Analysis	3		
Foundations of Ed.	3		
General Music	3		
	<u>17</u>		

1. Last two semesters may be reversed.
2. Recital should be given during the semester not scheduled for student teaching.
3. Student must be enrolled in a major ensemble for six semesters; e.g. Band or Orchestra.

B.S. IN MUSIC EDUCATION

Suggested course of study leading to the Bachelor of Science in Music Education, Vocal and General Music:

Vocal and General Music Majors
(includes voice, keyboard, or guitar as major instruments)

Freshman Year

<i>1st Semester</i>		<i>2nd Semester</i>	
Music Theory (& Lab)	4	Music Theory (& Lab)	4
Piano Class	1	Piano Class	1
Private Lessons	1	Private Lessons	1
Music Organization	1	Music Organization	1
English	3 Gp. I	Intro. to Music Lit.	3 Gp. I
General Ed. Req.	4 Gp. II	English	3 Gp. I
General Ed. Req.	1 Gp. IV	General Psychology (req.)	3 Gp. II
	<u>15</u>	General Ed. Req.	1 Gp. IV
			<u>17</u>

Sophomore Year

<i>1st Semester</i>		<i>2nd Semester</i>	
Music Theory	4	Music Theory	4
Voice Class	1	Voice Class	1
Woodwind Class	1	Brass Class	1
Music Organization	1	Music Organization	1
Private Lessons	1	Private Lessons	1
General Ed. Req.	2 Gp. I	Development Psyc.	3
General Ed. Req.	3 Gp. I	General Ed. Req.	3 Gp. III
General Ed. Req.	3 Gp. III	General Ed. Req.	3 Gp. III
	<u>16</u>		<u>17</u>

Junior Year

<i>1st Semester</i>		<i>2nd Semester</i>	
History of Music	3	History of Music	3
Percussion Class	1	General Music Course	3
String Class	1	General Ed. Req.	3 Gp. III
Music Organization	1	Choral Conducting (now 2 cr.)	3
Private Lessons	1	Music Organization	1
Music in Elem. Sch. (now 2 cr.)....	3	Private Lessons	1
General Ed. Req.	2 Gp. I	Survey of Ed.	3
General Ed. Req.	3 Gp. II		<u>17</u>
	<u>15</u>		

Senior Year

<i>1st Semester</i>		<i>2nd Semester</i>	
Choral & Inst. Arr.	3	Student Teaching in Elem. Sch.	6
Music Organization	1	Student Teaching in Sec. Sch.	6
Private Lessons	1	Music in Sec. Sch.	3
Org. and Adm. of			<u>15</u>
Music Ed.	3		
Foundations of Ed.	3		
Form and Analysis	3		
Elective	3		
	<u>17</u>		

1. Last two semesters may be reversed.
2. Recital should be given during the semester not scheduled for student teaching.
3. Student must be enrolled in a major ensemble for six semesters; eg. choir, community chorus, Men's Glee Club, or Women's Glee Club.

B.A. IN PERFORMANCE

Suggested course of study leading to the Bachelor of Arts in Performance.

Freshman Year

<i>1st Semester</i>		<i>2nd Semester</i>	
Theory (& Lab)	4	Theory (& Lab)	4
Private lessons	2	Private lessons	2
General Ed. Req.	2 Gp. I	Intro. Music Lit.	3 Gp. I
English	3 Gp. I	English	3 Gp. I
General Ed. Req.	4 Gp. II	General Ed. Req.	3 Gp. II
Music Organization	1	Music Organization	1
	<u>16</u>		<u>16</u>

Sophomore Year

<i>1st Semester</i>		<i>2nd Semester</i>	
Theory	4	Theory	4
Private lessons	2	Private lessons	2
General Ed. Req.	3 Gp. III	General Ed. Req.	3 Gp. III
Foreign Language	3	Foreign Language	3
Lit. survey in Major	3	General Ed. Req.	3 Gp. III
Music Organization	1	Music Organization	1
General Ed. Req.	1 Gp. IV	General Ed. Req.	1 Gp. IV
	<u>17</u>		<u>17</u>

Junior Year

<i>1st Semester</i>		<i>2nd Semester</i>	
Music History	3	Music History	3
Private lessons	2	Private lessons	2
Foreign Language	3	Foreign Language	3
General Ed. Req.	3 Gp. II	General Ed. Req.	3 Gp. I
General Ed. Req.	2 Gp. I	General Ed. Req.	3 Gp. III
Music Organization	1	Music Organization	1
Advised Music Elective	3		<u>15</u>
	<u>17</u>		

Senior Year

<i>1st Semester</i>		<i>2nd Semester</i>	
Private lessons	2	Private lessons	2
Pedagogy & Practice	3	Advised Music Elective	3
Music Organization	1	Music Organization	1
Form and Analysis	3	Conduction	3
Advised Music Elective	3	Elective	3
Elective in Liberal Arts	3	Recital	0
	<u>15</u>		<u>15</u>

Student must be enrolled in a major ensemble each semester.

B.A. IN MUSIC LITERATURE

Suggested course of study leading to the Bachelor of Arts in Music Literature.

Freshman Year

<i>1st Semester</i>		<i>2nd Semester</i>	
Music Theory (& Lab)	4	Music Theory (& Lab)	4
Private Lessons	1	Private Lessons	1
Music Organization	1	Music Organization	1
Gen'l Educ. Requirement	2 Gp. I	Intro. to Music Literature	3 Gp. I
English	3 Gp. I	English	3 Gp. I
Gen'l Educ. Requirement	4 Gp. II	Gen'l Educ. Requirement	3 Gp. II
Gen'l Educ. Requirement	1 Gp. IV	Gen'l Educ. Requirement	1 Gp. IV
	<u>16</u>		<u>16</u>

Sophomore Year

<i>1st Semester</i>		<i>2nd Semester</i>	
Music Theory	4	Music Theory	4
Private Lessons	1	Private Lessons	1
Music Organization	1	Music Organization	1
Gen'l Educ. Requirement	2 Gp. I	Gen'l Educ. Requirement	3 Gp. III
Gen'l Educ. Requirement	3 Gp. I	Gen'l Educ. Requirement	3 Gp. III
Gen'l Educ. Requirement	3 Gp. III	Language	3
Language (Fr. or German)	<u>3</u>		<u>15</u>
	<u>17</u>		

Junior Year

<i>1st Semester</i>		<i>2nd Semester</i>	
Music History	3	Music History	3
Music Organization	1	Music Organization	1
Private Lessons	1	Private Lessons	1
Gen'l Educ. Requirement	3 Gp. II	Gen'l Educ. Requirement	3 Gp. III
Counterpoint	3	Arranging I	3
Adv. Music Lit. (Symphonic Lit.		Form and Analysis	3
Amer. Music, Hist. of Jazz)	3	Language	3
Language	<u>3</u>		<u>17</u>
	<u>17</u>		

Senior Year

<i>1st Semester</i>		<i>2nd Semester</i>	
Music Organization	1	Music Organization	1
Private Lessons	1	Private Lessons	1
Adv. Mus. Hist. or Lit.	6	Adv. Mus. Hist. or Lit.	6
Elective	5	Elective	3
Research	<u>0</u>	Research	<u>4</u>
	<u>13</u>		<u>15</u>

Student must be enrolled in a major ensemble each semester.

B.A. IN MUSIC THEORY

Suggested course of study leading to the Bachelor of Arts in Music Theory.

Freshman Year

<i>1st Semester</i>		<i>2nd Semester</i>	
Theory (& Lab)	4	Theory (& Lab)	4
Private or Class Piano	1	Private or Class Piano	1
Music Organization	1	Music Organization	1
English	3 Gp. I	Intro. to Music Lit.	3 Gp. I
Gen'l Educ. Requirement	3 Gp. I	English	3 Gp. I
Gen'l Educ. Requirement	4 Gp. II	Gen'l Educ. Requirement	3 Gp. II
Gen'l Educ. Requirement	1 Gp. IV	Gen'l Educ. Requirement	1 Gp. IV
	<u>17</u>		<u>16</u>

Sophomore Year

<i>1st Semester</i>		<i>2nd Semester</i>	
Harmony	4	Harmony	4
Voice Class	1	Gen'l Educ. Requirement	3 Gp. III
English	3 Gp. I	Gen'l Educ. Requirement	3 Gp. III
Gen'l Educ. Requirement	2 Gp. I	Foreign language	3
Foreign language	3	Music Organization	1
Music Organization	1	Private Lessons	<u>1</u>
Private Lessons	<u>1</u>		<u>15</u>
	<u>15</u>		

Junior Year

<i>1st Semester</i>		<i>2nd Semester</i>	
Counterpoint	3	Counterpoint	3
Arranging I	3	Arranging II	3
Music History	3	Music History	3
Foreign language	3	Foreign language	3
Gen'l Educ. Requirement	3 Gp. II	Gen'l Educ. Requirement	3 Gp. III
Private Lessons	1	Private Lessons	1
Music Organization	<u>1</u>	Music Organization	<u>1</u>
	<u>17</u>		<u>17</u>

Senior Year

<i>1st Semester</i>		<i>2nd Semester</i>	
Composition	3	Composition	3
Form and Analysis	3	Conducting	3
Gen'l Educ. Requirement	3	Music Lit. (Voc. or Inst.)	3
Music Organization	1	Music Organization	1
Private lessons	1	Private Lessons	1
Elective in Liberal Arts or Music	<u>5</u>	Elective	<u>5</u>
	<u>16</u>		<u>16</u>

Student must be enrolled in a major ensemble each semester.

Private lessons in the Sophomore, Junior, and Senior years can be an area other than piano if the student demonstrates a proficiency at the keyboard approved by the theory advisor.

MUSIC COURSES (MUSC)

Lower Division — Undergraduate

54.101 (103) INTRODUCTION TO MUSIC LITERATURE (2) Music literature to acquaint the student with music through class discussions and listening. Suggested course for the General Education requirement.

54.131-132 MUSIC THEORY I AND II (4-4) The study and practice of sight singing, ear training, and harmony in integrated course. Prerequisite for Theory I: Ability to read treble and bass clefs and knowledge of major and minor scales. Prerequisite for Theory II: Theory I.

54.141-142 BRASS ENSEMBLE (1, 1) Study and performance of advanced brass literature, required of all students majoring in brass instruments. Admission by permission of the director.

54.145-146 PERCUSSION ENSEMBLE (1, 1) Study and performance of advanced percussion literature; supplement and improve the percussion student's musical training by acquainting the student with the various techniques involved in performing on the numerous percussion instruments.

54.149-150 STRING ENSEMBLE (1, 1) Study and performance of advanced string literature, required of all students majoring in string instruments. Admission by permission of the director.

54.151-152 VOICE ENSEMBLE (1, 1) Small group study and performance of advanced choral literature. Admission by permission of director.

54.153-154 WOODWIND ENSEMBLE (1, 1) Study and performance of advanced woodwind literature required of all students majoring in woodwind instruments. By permission of the director.

54.155-156 CLARINET CHOIR (1-1) Study and performance of clarinet choir literature. Open to all students by audition.

54.157-158 JAZZ ENSEMBLE (1, 1) Study and performance of music of the jazz idiom. Open to all students by audition.

54.159-160 COMMUNITY CHORUS (1, 1) Study and performance of advanced choral literature. Admission by permission of the director.

54.161-162 CONCERT CHOIR (1, 1) Study and performance of advanced choral literature. Open to all students by audition.

54.163-164 MEN'S GLEE CLUB (1, 1) Study and performance of choral literature written and arranged for male voices. Open to all male students with permission of director.

54.165-166 WOMEN'S GLEE CLUB (1, 1) Study and performance of choral literature of female voices. Open to all female students with permission of the director.

54.167-168 ORCHESTRA (1, 1) Study of orchestral literature. Open to all students by audition.

54.169-170 CONCERT BAND (1, 1) Study and performance of band literature. Open to all students by audition.

54.171 (150) BRASS PRIVATE LESSONS (1-3) Private lessons in brass. Fee of \$50.00 per semester per credit. One half-hour lesson per week.

54.172 (150) BRASS PRIVATE LESSONS (1-3) Private lessons in brass. Fee of \$50.00 per semester per credit. One half-hour lesson per week.

54.173 (150) ORGAN PRIVATE LESSONS (1-3) Private lessons in organ. Fee of \$50.00 per semester per credit. One half-hour lesson per week.

54.174 (150) ORGAN PRIVATE LESSONS (1-3) Private lessons in organ. Fee of \$50.00 per semester per credit. One half-hour lesson per week.

54.175 (150) PERCUSSION PRIVATE LESSONS (1-3) Private lessons in percussion. Fee of \$50.00 per semester. One half-hour lesson per week.

54.176 (150) PERCUSSION PRIVATE LESSONS (1-3) Private lessons in percussion. Fee of \$50.00 per semester. One half-hour lesson per week.

54.177 (150) PIANO PRIVATE LESSONS (1-3) Private lessons in piano. Fee of \$50.00 per semester per credit. One half-hour lesson per week.

54.178 (150) PIANO PRIVATE LESSONS (1-3) Private lessons in piano. Fee of \$50.00 per semester per credit. One half-hour lesson per week.

54.179 (150) STRING PRIVATE LESSONS (1-3) Private lessons in strings. Fee of \$50.00 per semester per credit. One half-hour lesson per week.

54.180 (150) STRING PRIVATE LESSONS (1-3) Private lessons in strings. Fee of \$50.00 per semester per credit. One half-hour lesson per week.

54.181 (150) VOICE PRIVATE LESSONS (1-3) Private lessons in voice. Fee of \$50.00 per semester per credit. One half-hour lesson per week.

54.182 (150) VOICE PRIVATE LESSONS (1-3) Private lessons in voice. Fee of \$50.00 per semester per credit. One half-hour lesson per week.

54.183 (150) WOODWIND PRIVATE LESSONS (1-3) Private lessons in woodwinds. Fee of \$50.00 per semester per credit. One half-hour lesson per week.

54.184 (150) WOODWIND PRIVATE LESSONS (1-3) Private lessons in woodwinds. Fee of \$50.00 per semester per credit. One half-hour lesson per week.

54.185 (150) GUITAR PRIVATE LESSONS (1-3) Private lessons in guitar. Fee of \$50.00 per semester per credit. One half-hour lesson per week.

54.186 (150) GUITAR PRIVATE LESSONS (1-3) Private lessons in guitar. Fee of \$50.00 per semester per credit. One half-hour lesson per week.

54.187 COMPOSITION PRIVATE LESSONS (1-3) Private lessons in composition. Fee of \$50.00 per semester. One half-hour lesson per week.

54.188 COMPOSITION PRIVATE LESSONS (1-3) Private lessons in composition. Fee of \$50.00 per semester per credit. One half-hour lesson per week.

54.211-212 BRASS CLASS (1-1) Class instruction in brass instruments.

54.215-216 PERCUSSION CLASS (1-1) Class instruction in percussion instruments.

54.217-218 (242, 243) PIANO CLASS (1-1) Class instruction in piano playing, with one hour daily practice in preparation required. Open to beginning students and students with a minimum of piano work, by permission of the department chairman.

54.219-220 (220, 221) STRING CLASS (1-1) Class instruction in string instruments.

54.221-222 (205, 206) VOICE CLASS (1-1) Class instruction in singing, with emphasis upon basic singing techniques and voice production through the use of song material.

54.223-224 WOODWIND CLASS (1-1) Class instruction in woodwind instruments.

54.225 GUITAR CLASS (1) Survey of literature available for Classical Guitar from early Baroque to present; including works by Haydn, Bach, Vivaldi, and Villa-Lobos. A study of Classical Guitar Technique and style.

54.231-232 THEORY III AND IV (4-4) The study and practice of sight singing, ear training, and harmony in an integrated course. Prerequisite for Theory III: Theory II. Prerequisite for Theory IV: Theory III.

54.233 (203) MUSIC FUNDAMENTALS (2) Basic music skills and experience in the use of music instruments for prospective kindergarten and elementary teachers.

54.241-242 (232, 233) BRASS ENSEMBLE (1, 1) Study and performance of advanced brass literature, required of all students majoring in brass instruments. By permission of the director.

54.245-246 () PERCUSSION ENSEMBLE (1, 1) Study and performance of advanced percussion literature; acquainting the students with the various techniques involved in performing on the numerous percussion instruments.

54.249-250 (230, 231) STRING ENSEMBLE (1, 1) Study and performance of advanced string literature, required of all students majoring in string instruments. Admission by permission of the director. choral literature. Admission by permission of director.

54.251-252 (213, 214) VOICE ENSEMBLE (1, 1) Small group study and performance of advanced choral literature. Admission by permission of Director.

54.253-254 (234, 235) WOODWIND ENSEMBLE (1, 1) Study and performance of advanced woodwind literature required of all students majoring in woodwind instruments, by permission of the director.

54.257-258 () JAZZ ENSEMBLE (1, 1) Study and performance of music of the jazz idiom. Open to all students by audition.

54.259-260 () COMMUNITY CHORUS (1, 1) Study and performance of advanced choral literature. Admission by permission of the director.

54.261-262 (211, 212) CONCERT CHOIR (1, 1) Study and performance of advanced choral literature. Open to all students with audition.

54.263-264 (217, 218) MEN'S GLEE CLUB (1, 1) Study and performance of choral literature written and arranged for male voices. Open to all male students by permission of director.

54.265-266 (209, 210) WOMEN'S GLEE CLUB (1, 1) Study and performance of choral literature for female voices. Open to all female students by permission of director.

54.267-268 (215, 216) ORCHESTRA (1, 1) Study of orchestral literature. Open to all students by audition.

54.269-270 (240, 241) CONCERT BAND (1, 1) Study and performance of band literature. Open to all students by audition.

54.271-286 (250) PRIVATE LESSONS (1-3) Refer to 171-186 for course description, fee and time.

Upper Division – Undergraduate and Graduate

54.301-302 (228, 229) HISTORY OF MUSIC (3,3) Study of development of music in the western world through discussion, performance and recording. First semester includes music from the Greeks to the end of the Baroque period. Second semester traces the development of music from the Classic period to the present.

54.311 ACCOMPANYING (3) Study of vocal and instrumental accompanying with emphasis upon sight reading, transposition, and acquaintance with vocal and instrumental literature. Permission of instructor.

54.327 (316) CHORAL CONDUCTING (2) Group instruction in basic conducting techniques and interpretation with relation to choral organizations. Prerequisite: 54.233 or permission of instructor.

54.329 (317) INSTRUMENTAL CONDUCTING (2) Group instruction in basic conducting techniques and interpretation with relation to instrumental organizations. Prerequisite: 54.233 or permission of instructor.

54.335 (324) CHORAL AND INSTRUMENTAL ARRANGING (3) Composition and arranging techniques for voices and/or instruments. Prerequisite: 54.233, 54.331-54.332, equivalent, or permission of instructor.

54.341-342 BRASS ENSEMBLE (1, 1) Study and performance of advanced brass literature, required of all students majoring in brass instruments. By permission of the director.

54.345-346 PERCUSSION ENSEMBLE (1, 1) Study and performance of advanced percussion literature; acquainting the students with the various techniques involved in performing on the numerous percussion instruments.

54.349-350 STRING ENSEMBLE (1, 1) Study and performance of advanced string literature, required of all students majoring in string instruments. Admission by permission of the director.

54.351-352 VOICE ENSEMBLE (1, 1) Small group study and performance of advanced choral literature. Admission by permission of director.

54.353-354 WOODWIND ENSEMBLE (1, 1) Study and performance of advanced woodwind literature required of all students majoring in woodwind instruments, by permission of the director.

54.357-358 JAZZ ENSEMBLE (1, 1) Study and performance of music of the jazz idiom. Open to all students by audition.

54.359-360 COMMUNITY CHORUS (1, 1) Study and performance of advanced choral literature. Admission by permission of the director.

54.361-362 CONCERT CHOIR (1, 1) Study and performance of advanced choral literature. Open to all students with audition.

54.363-364 MEN'S GLEE CLUB (1, 1) Study and performance of choral literature written and arranged for male voices. Open to all male students with permission of director.

54.365-366 WOMEN'S GLEE CLUB (1, 1) Study and performance of choral literature for female voices. Open to all female students by permission of director.

54.367-368 ORCHESTRA (1, 1) Study of orchestral literature. Open to all students by audition.

54.369-370 CONCERT BAND (1, 1) Study and performance of band literature. Open to all students by audition.

54.371-386 (350) PRIVATE LESSONS (1-3) Refer to MUSIC 171-186 for course description, fee and time.

54.401 (403) MUSIC PRIOR TO 1600 (3) The art of music in the West from its tentative beginnings in Greek and Hebrew music to the year 1600 A.D. Prerequisite: Consent of Department Chairman.

54.402 (404) MUSIC OF THE BAROQUE PERIOD (3) Style, forms and musical techniques from 1600 to 1750. Prerequisite: Consent of Department Chairman.

54.403 (405) MUSIC OF THE CLASSICAL PERIOD (3) Styles, forms and techniques of the period from 1750-1820. Particular emphasis is placed on instrumental categories of the string quartet, sonata, symphony and concerto as illustrated in the works of Haydn, Mozart and Beethoven. Attention is given to operatic and sacred compositions of the same masters. Prerequisite: Consent of Department Chairman.

54.404 (406) MUSIC OF THE ROMANTIC PERIOD (3) Musical styles, forms and techniques in the 19th century with special attention to the intellectual foundations of the Romantic movement. Prerequisite: Consent of Department Chairman.

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54.405 (407) CONTEMPORARY MUSIC (3) Styles, forms and musical techniques since 1900. Pre-requisite: Consent of Department Chairman.

54.411 (412) SURVEY OF OPERA (3) Study of opera literature of various periods and styles. Consent of Department Chairman.

54.413 (245) SYMPHONIC LITERATURE (3) Orchestral music from the baroque to the present. The concerto, symphony, overture and other orchestral forms are examined. Prerequisite: Consent of Department Chairman.

54.421 (413) AMERICAN MUSIC (3) American music from the Colonial Period to the present. Prerequisite: Consent of Department Chairman.

54.423 (414) HISTORY OF JAZZ (3) Development of jazz and its peripheral effects upon music.

54.425 (424) ADVANCED PERCUSSION (3) Study of advanced performance techniques on all percussion instruments. Prerequisite: Music 54.215, or consent of instructor.

54.433 (423) ADVANCED THEORY (3) Continued development of skills in more advanced melodic, harmonic and rhythmic aspects of music through hearing, playing and writing. Prerequisite: Theory.

54.435 (425) FORM AND ANALYSIS (3) Analysis of vocal and instrumental literature. Prerequisites: 54.331-54.332, and equivalent 54.335.

54.441-442 BRASS ENSEMBLE (1, 1) Study and performance of advanced brass literature, required of all students majoring in brass instruments. By permission of the director.

54.445-446 PERCUSSION ENSEMBLE (1, 1) Study and performance of advanced percussion literature; acquainting the students with the various techniques involved in performing on the numerous percussion instruments.

54.449-450 STRING ENSEMBLE (1, 1) Study and performance of advanced string literature, required of all students majoring in string instruments. Admission by permission of director.

54.451-452 VOICE ENSEMBLE (1, 1) Small group study and performance of advanced choral literature. Admission by permission of director.

54.453-454 WOODWIND ENSEMBLE (1, 1) Study and performance of advanced woodwind literature required of all students majoring in woodwind instruments, by permission of the director.

54.451-458 JAZZ ENSEMBLE (1, 1) Study and performance of music of the jazz idiom. Open to all students by audition.

54.459-460 COMMUNITY CHORUS (1, 1) Study and performance of advanced choral literature. Admission by permission of the director.

54.461-462 CONCERT CHOIR (1, 1) Study and performance of advanced choral literature. Open to all students with audition.

54.463-464 MEN'S GLEE CLUB (1, 1) Study and performance of choral literature written and arranged for male voices. Open to all male students with permission of director.

54.465-466 WOMEN'S GLEE CLUB (1, 1) Study and performance of choral literature for female voices. Open to all female students with permission of director.

54.467-468 ORCHESTRA (1, 1) Study of orchestral literature. Open to all students by audition.

54.469-470 CONCERT BAND (1, 1) Study and performance of band literature. Open to all students by audition.

54.471-486 (450) PRIVATE LESSONS (1-3) Refer to MUSIC 171-186 for course description, fee and time.

Graduate Division

54.501 () CURRENT TRENDS IN MUSIC AND MUSIC EDUCATION (3) A survey of current philosophies and objectives of music in the schools, and the scope and sequence of the music curricula, vocal and instrumental, on the elementary and secondary levels. Prerequisite: Admission to Graduate Program.

54.535 (524) ADVANCED CHORAL AND INSTRUMENTAL ARRANGING (3) Advanced arranging techniques including the scoring of original and other works for various combinations of instruments and/or voices. Prerequisite: 54.335, or equivalent, or consent of instructor.

54.539 () MUSIC COMPOSITION (3) Analysis and discussion of works of major composers. Writing of original compositions in vocal and instrumental idioms. Prerequisites: Music 201-202, 331-332, 335-435.

54.561 () SEMINAR IN INSTRUMENTAL MUSIC (3) Comparative analysis of current methods and materials used in schools and colleges. Instrumental conducting and repertoire. Construction of acoustical properties and basic techniques of instruments. Problems of ensemble and balance. Intonation, precision and interpretation are studied. Materials and music literature for bands, orchestras and small ensembles are evaluated. Prerequisite: Admission to the Graduate Program.

54.562 () SEMINAR IN CHORAL (VOCAL) MUSIC (3) Comparative analysis of current methods and materials used in schools and colleges. Choral conducting and repertoire. Style, interpretation, tone quality, diction, rehearsal and conducting techniques are analyzed. Prerequisite: Admission to the Graduate Program.

54.571-586 (550) PRIVATE LESSONS (1-3) Refer to MUSIC 171-186 for course description, fee and time.

54.595 (550) RESEARCH METHODS IN MUSIC AND MUSIC EDUCATION (3) The application of methods of research to problems in the field of music and music education, the preparation of bibliographies and specialized techniques for the location, collection and treatment of data. The written exposition of research projects in the area of the student's major interest. Prerequisite: Admission to the Graduate Program.

EDUCATION MUSIC

Lower Division — Undergraduate

54.233 (203) MUSIC FUNDAMENTALS (2) Basic music skills and experience in the use of music instruments for prospective kindergarten and elementary teachers.

Upper Division — Undergraduate Only

54.307 (372) TEACHING MUSIC IN THE ELEMENTARY SCHOOLS (2) Acquaints students with music programs in the elementary school through lecture, class discussion, and practice with children. Prerequisite: 54.203.

54.309 (392) TEACHING MUSIC IN THE SECONDARY SCHOOL (3) Current methods and materials used by the music specialist. Open only to students in the student teaching block.

Upper Division — Undergraduate and Graduate

54.407 MUSIC IN THE ELEMENTARY SCHOOL—ADVANCED (3) Seminar in teaching techniques and problems of elementary school music; application of theory via work with children. After initial meeting, class meets at off-campus teaching center.

54.408 (400) ORGANIZATION AND ADMINISTRATION OF MUSIC EDUCATION (3) Seminar discussion of the problems of organization and administration of music education. Prerequisite: Music Student Teaching, and/or consent of the instructor.

54.491 (480) INSTRUMENTAL WORKSHOP (2) Reading of new band publications. To give the band director an opportunity to hear new publications for band, and to serve as a conducting laboratory for students and directors. Prerequisite: Consent of instructor.

PHILOSOPHY AND RELIGION

Professors: EBERHARDT (Chairman) MADDEN

Assistant Professors: FUCHS, HILL, MURUNGI

Courses offered by the Department are historical, systematic, analytic, or speculative, according to the nature of the course, the interests of the instructor, and the composition of the particular class. The attitude that informs all courses is scholarly or speculative, rather than sectarian or dogmatic.

REQUIREMENTS FOR THE MAJOR AND MINOR

Basic Requirements

- 58.101 Introduction to Philosophy
- 58.203 Logic
- 58.403 Ethics

And four courses from the following –

- 58.321 Pre-Socratic and Classical Greek Philosophy,
- 58.322 Late Classical and Medieval Philosophy,
- 58.323 Renaissance to 17th Century Philosophy,
- 58.324 18th and 19th Century Philosophy, or
- 58.325 Schools of Contemporary Philosophy

Additional requirements for the minor:

All of the above, plus any other term course (3 credits) for a total of 24 credits.

Additional requirements for the major:

In addition to the above basic requirements, four other term courses (12 credits) including at least two term courses in the 409 or 411 series are required. Two term courses (6 credits) may, with the permission of the Chairman, be taken in allied disciplines, e.g., history, mathematics, political theory, psychology, religion. In exceptional instances students may, with permission, make substitutions for required courses, e.g., a higher numbered course may be substituted for a lower numbered course.

Note: Courses numbered 409 (Philosophical Systems) and 411 (Philosophical Problems or Topics) may be taken in two or more terms provided the subject matter of the course differs. The subject matter of courses 409 and 411 will be indicated by the subtitle in the Schedule of Courses issued each term by the Registrar's Office. For example, 58.409: Philosophical Systems: Plato, and 58.409: Philosophical Systems: Kant, might both be taken for credit in the same or different terms, the difference in the content of the courses being indicated on the student's transcript by the different subtitles of the courses.

PHILOSOPHY AND RELIGION COURSES (PHIL)**Lower Division — Undergraduate**

58.101 (101) INTRODUCTION TO PHILOSOPHY (3) An introduction to some fundamental problems of philosophy and to various proposals for the solution of these problems.

58.203 (203) LOGIC (3) Study of and practice in inductive and deductive reasoning, the composition of argument, and demonstration, and the detection of logical and non-logical fallacies.

Upper Division — Undergraduate and Graduate

58.321 (321) PRE-SOCRATIC AND CLASSICAL GREEK PHILOSOPHY (3)

58.322 (322) LATE CLASSICAL AND MEDIEVAL PHILOSOPHY (3) (Should not be attempted without having taken 58.101 or 58.321.)

58.323 (323) RENAISSANCE TO 17TH CENTURY PHILOSOPHY (3) (Should not be attempted without having taken 58.101 or 58.321.)

58.324 (324) 18TH AND 19TH CENTURY PHILOSOPHY (3) (Should not be attempted without having taken 58.101 or 58.321.)

58.325 (325) SCHOOLS OF CONTEMPORARY PHILOSOPHY (3) A survey with varying emphases on a number of such contemporary philosophical positions as pragmatism, phenomenology, logical positivism, the analysts, neo-Aristotelianism, the philosophers of science, and the existentialists. (Should not be attempted without having taken 58.101 or 58.321.)

58.401 (401) THEORY OF KNOWLEDGE (3) An historical and systematic approach to the truth value and elements of the forms of human knowledge. The theories of major philosophers will be studied.

58.403 (403) ETHICS (3) Analysis of reading from the principle classical and contemporary ethical sources; study of the basic moral concepts as found in these sources; application to contemporary moral concerns.

58.405 (405) AESTHETICS (3) An analytic and historical examination of concepts of the nature of art, beauty, aesthetic value, aesthetic perception, and of the modes of existence of artifacts.

58.409 (409) PHILOSOPHICAL SYSTEMS (3) The study of a major philosophical system or position, classical or modern, and of its important proponents. Prerequisites required: 58.203, one other lower level course in philosophy, and consent of the Department.

58.411 (411) PHILOSOPHICAL PROBLEMS (3) A consideration of one of the perennial interests of philosophy. Prerequisites required: 58.203, one other lower level course in philosophy, and consent of the Department.

58.451 (451) PHILOSOPHY OF RELIGION (3) Exposition of various approaches to the philosophy of religion with an analysis of the major issues on which they differ and agree.

58.453 (453) OLD TESTAMENT LITERATURE (3) Major themes of the Biblical Literature, and if its religious, philosophical and cultural implications.

58.454 (454) NEW TESTAMENT LITERATURE (3) Major themes of the Biblical Literature, and of its religious, philosophical and cultural implications.

58.455 (455) HELLENISTIC ERA (3) Three significant phases of the preparation of the Mediterranean world for the Hebraic-Hellenic synthesis: (1) Judaism, (2) Hellenism, and (3) the Roman conquest. Contribution of archeology will be indicated.

58.457 (457) COMPARATIVE RELIGIONS (3) Religions of primitive, and civilized people, including an historical and comparative study of the great religions of the world, both ancient and modern.

58.459 (459) RELIGION IN AMERICA (3) Ideas and forms of organization of Protestantism, Catholicism, and Judaism in the United States.

58.495 (495) RESEARCH TUTORIAL IN PHILOSOPHY (3) Directed readings and research leading to a thesis paper under one or more members of The Department. Open only to philosophy majors or students with demonstrated competency and having senior standing.

PHYSICAL EDUCATION

Professor: DR. SHEETS (Director of the Division of Health and Physical Education)

MEN'S DEPARTMENT

MR. McGINTY, Chairman

Professor: MINNEGAN

Associate Professor: KILLIAN

Assistant Professors: ANGOTTI, FIELD, KOUNESKI, McDONALD, RIORDON, RUNK

Instructors: ALBERT, FORBES, TOWNSEND

WOMEN'S DEPARTMENT

DR. CONARD, Chairman

Professor: BIZE

Associate Professors: KELLY, ROACH, VERKRUZEN

*Assistant Professors: BOUTON, *EASON, *GUSTAFSON, HARRIS, ROBERTON*

Instructors: CLEAVES, COBLE, DUNCAN, FINCH, EVANS, HARRY, SCHNEIWEISS, WRIGHT

The program of physical education is planned to provide the student with an opportunity to acquire the skills and an understanding of selected physical activities. Emphasis is placed on the development of sufficient competence to promote satisfaction and enjoyment in sports and recreational activities. Courses selected from Physical Education 009-059 meets the requirement. A modified section is offered for women and an adapted section is offered for men. Students age thirty or over are eligible for a modified or adapted section. These students may, however, elect a nonmodified program of physical education.

PHYSICAL EDUCATION MAJOR

Students may select a major in physical education. The purpose of the major is to prepare competent teachers of physical education for the public schools of Maryland. Graduates are certified to teach at both the elementary and secondary level. A planned sequence of courses is designed to provide

* on leave 1969-70

the student with skills and leadership experiences needed to direct a balanced program in class, intramural and extramural activities, and varsity sports. All men physical education majors must serve two semesters as a member of an intercollegiate team or teams.

A physical education major takes the general college requirements, and must complete Physical Science or Physics, Biology and Human Anatomy and Physiology. Additional requirements are listed below. A total of thirty-four credit hours of physical education are required for a major in physical education.

	Course No.	Cr.	Course No.	Cr.
I <i>Biology</i>			Care & Prevention of Athletic Injuries	315 2
Human Anatomy and Physiology (Fulfills general education requirement for Science elective)	14.113-114	8	Coaching and Officiating (required for men elective for women)	321-322 1-1
II <i>Psychology</i>			VI <i>Professional-Laboratory Skills</i>	
Educational Psychology	70.203	3	Men	
III <i>Health</i>			Required:	9
First Aid	38.103	1	Badminton-Volleyball, Baseball-Softball, Basic Rhythms, Basketball, Conditioning, Elementary Games, Folk Dance, Football, Golf, Gymnastics I, Gymnastics II, Lacrosse, Soccer, Swimming, Tennis, Track and Field, Wrestling.	
School Health Program	38.201	2	Elective:	
IV <i>Education</i>			Archery, Bowling, Golf II, Sr. Life Saving, W.S.I., Gymnastics III, Tennis II, Swimming II.	
Introduction to Teaching	26.101	1	Women	
Teaching Physical Education in the Elementary School	60.324	2	Required:	
Survey of Education	26.319	3	Archery, Badminton, Basic Rhythms, Basketball, Body Mechanics, Elementary Games, Field Hockey, Folk Dance, Gymnastics I, Gymnastics II, Lacrosse, Modern Dance, Soccer, Softball, Swimming, Track and Field, Tennis, Volleyball.	
Student Teaching (elementary and secondary levels)	26.497		Elective:	
Laboratory in New Educational Media	27.398	12	Basketball II, Bowling, Fencing, Golf, Golf II, Gymnastics III, Modern Dance, Social Dance, Sr. Life Saving, Swimming II, Synchronized Swimming, Tennis II, Team Sports, W.S.I.	
Teaching Physical Education in the Secondary School	13.369	1		
Foundation of Education	60.325	2		
Tests and Measurements	26.401	2		
Organization and Administration	60.309	3		
Principles and Problems of Physical Education	60.401-402	2-2		
Adaptive Physical Education	60.423	2		
V <i>Physical Education</i>				
Theory — Men and Women				
Overview of Physical Education	199	2		
Curriculum in Physical Education	203	3		
Kinesiology	311	3		
Physiology of Exercise	313	2		

PHYSICAL EDUCATION COURSES (PHED)

Prefix for co-education is 60; Prefix for men is 61; Prefix for women is 62.

Service Division

009-059 PHYSICAL EDUCATION FOR NON-MAJORS (0.5-1.0) Physical education for the nonprofessional student. A systematic approach to the development of individual skills at various levels. How to acquire and to maintain fitness through the medium of physical activity. Required of all students except Physical Education majors who substitute Professional Laboratory Skills.

009	Adaptive —	023-024	Fencing	039	Movement	049-050	Synchronized
	Modified	025-026	Field Hockey		Funda- mentals	051	Swimming
011-012	Archery	027-028	Folk Dance	040	Rhythmic		Senior Life
013-014	Badminton	029	Football		Funda- mentals	052	Saving
015	Baseball	031-032	Golf			053-054	Water Safety
017-018	Basketball	033-034	Gymnastics	041	Soccer	055	Instructors
019	Body Me- chanics	035	Handball	043-044	Softball	056-057	Tennis
020	Bowling	036	Lacrosse	045-046-		058	Track and
021	Conditioning	037-038	Modern	047	Swimming	059	Field
			Dance				Volleyball
							Wrestling

Lower Division — Undergraduate

101-102 SOPHOMORE PHYSICAL EDUCATION FOR NON-MAJORS (1,1) Physical education required of the elementary and early childhood education students. May be elected by others. An approach to help the student develop and maintain physical fitness; to develop an understanding of and ability in the fundamental skills; to develop game habits and understandings; to become familiar with methods of learning skills and physical education activities; and to appreciate the needs of the individual in motor learning. Prerequisite: One semester hour of credit in physical education selected from 001-059. Transfer students should consult with Department Chairman.

103-159 PROFESSIONAL LABORATORY SKILLS (0.5-1.0) Professional laboratory skills provide instruction in the basic activities appropriate for a teacher of physical education.

103-104	Archery	118-119	Elementary	133-134	Lacrosse	149-150	Synchronized
105-106	Badminton		Games	135-136	Modern	151	Swimming
107-108	Baseball	120-121	Fencing		Dance		Senior Life
109-110	Basic Rhythms	122-123	Field Hockey	137-138	Social Dance	152	Saving
111-112	Basketball	124-125	Folk Dance	139	Net Games	153-154	Water Safety
113	Body Me- chanics	126-127	Football	141-142	Soccer	155-156	Instructor
114-115	Bowling	128-129	Golf	143-144	Softball	157-158	Tennis
116-117	Conditioning	130-131-		145-146-		159	Track and
		132	Gymnastics	147	Swimming		Field
							Volleyball
							Wrestling

PROFESSIONAL THEORY COURSES

199 OVERVIEW OF PHYSICAL EDUCATION (2) Brief history of physical education, the place of physical education in education today, leadership qualities and leaders in the field, professional ethics and standards, professional organizations (their purpose and function), and an introduction to professional literature

203 CURRICULUM IN PHYSICAL EDUCATION (3) Aims and objectives in physical education and analysis of outstanding programs in the state and nation. Development of programs appropriate to various age levels and consideration of progression within activities. The application and evaluation of a physical education program as applied to the elementary and secondary level.

205 CAMP LEADERSHIP (2) Educational objectives, program, responsibilities and qualifications of a camp counselor; facilities, and standards of organized camping.

Upper Division – Undergraduate and Graduate

301 RECREATION (3) Preparation for leadership and organization of after-school activities for children, such as club, hiking, camping, and playground activities. Visits to recreation centers. Specialists in story telling, crafts, recreational singing, playground and club work give part of the course. Participation in some organized recreation with children.

303 ORGANIZATION AND ADMINISTRATION (3) Investigation of policies and procedures in the organization and administration of physical education. Areas covered include facilities, equipment, budget, scheduling, special events, records, awards.

305 SCHOOL CAMPING AND OUTDOOR EDUCATION (2) Aims, organization, administration, and program of the school camp.

309 TESTS AND MEASUREMENT IN PHYSICAL EDUCATION (3) Background for development of measurement programs in physical education; elementary statistical procedures; interpretation of data; selection and administration of tests measuring fitness, motor ability, and sports skills applicable to various grade and age levels.

311 KINESIOLOGY (3) Mechanical and anatomical analysis of movement in relation to human performance. Prerequisite: PhSc 64.101, Biol 14.113-114.

313 PHYSIOLOGY OF EXERCISE (2) Application of principles of physiology to large muscle activity, with special emphasis on the interrelations of muscular, nervous, circulatory, and respiratory functions during exercise. Prerequisite: Biol 14.113-114.

315 CARE AND PREVENTION OF ATHLETIC INJURIES (2) Theoretical and practical methods of preventing and treating athletic injuries; techniques of taping and bandaging; emergency first aid; massage; use of physical therapy modalities.

317 MODERN DANCE COMPOSITION (2,3) Approaches to composition through short studies directed toward a feeling of phasing and form in dance. To be offered as an elective for the physical education major or for any interested student. Prerequisite: Approval of instructor.

319-320 CHOREOGRAPHIC PROBLEMS (3,3) Studies on the intermediate level using Pre-Classic forms and modern idioms of dance. Problems involved in choreographing for solo, duet, and small group dances. Prerequisite: 317.

321-322 COACHING AND OFFICIATING (1) Fundamentals, tactics, strategy, ethics, and other factors in coaching sports. Prerequisite: Professional Laboratory Skills related to Team Sports.

324 TEACHING PHYSICAL EDUCATION IN ELEMENTARY SCHOOLS (2) The focus of this course is the child-in-motion. Specific attention centers on progressions for teaching motor skills, methods of organization, direct and indirect teaching methods, and motor development. Opportunities to observe and teach children are provided.

325 TEACHING PHYSICAL EDUCATION IN SECONDARY SCHOOLS (2) The course is designed to apprise the major physical education student of the techniques of successful teaching and to introduce methods of teaching. The course provides the opportunity to organize unit plans and lesson plans and to observe in the secondary school.

401-402 PRINCIPLES AND PROBLEMS OF PHYSICAL EDUCATION (2,2) The scientific foundation of physical education and current problems in the fields of physical education. Prerequisite: 199, 203, 303.

412 THEORY AND ANALYSIS OF GYMNASTICS MOVEMENT (3) Theoretical and practical application of mechanical analysis of movement concepts as related to proper execution of skills in gymnastics: The techniques and methods used in this course are designed to provide the teacher a logical system for presenting gymnastic skills to facilitate learning for the student; to demonstrate that gymnastic skills are logically founded on basic physics or terrestrial mechanics; to present aiding and spotting techniques.

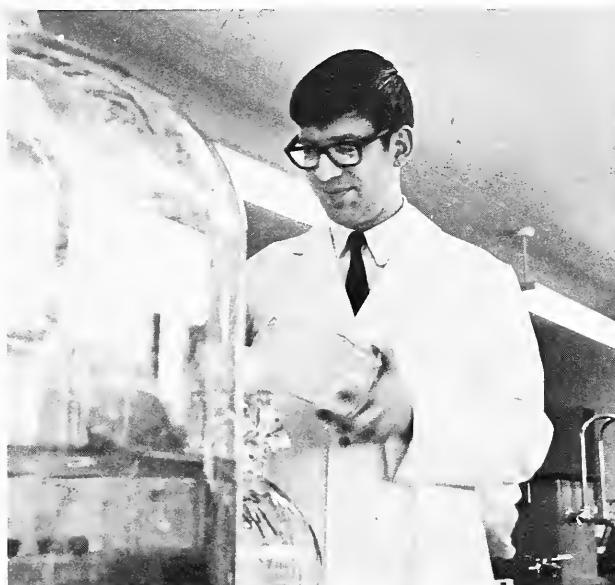
419 SWIMMING AND POOL MANAGEMENT (2) An advanced course in teaching methods for all levels of swimming and diving. Modern methods of training the competitive swimmer with emphasis on technique and conditioning of the individual. The organization and administration of swimming pools and clubs with regard to staff, recreation and pool filtration. Prerequisites: Senior lifesaving and Water Safety Instructors. This is a certifiable course for pool management, approved by the Department of Health, Baltimore County.

421 PHYSICAL EDUCATION PROGRAM IN THE ELEMENTARY SCHOOLS (3) Aims of the physical education program, appropriate outcomes for different age levels and the selection and use of materials that contribute to the accomplishment of these objectives. Prerequisite: 101-159, 201, 202 or 161-197.

423 ADAPTIVE PHYSICAL EDUCATION (2) Recognition of pupils with physical deviations, and use of special or modified physical education activities. Prerequisite: 311.

425 MODERN DANCE IN THE SECONDARY SCHOOL (3) Dance techniques and elements of composition for the secondary school teacher. Not open to those who have taken Modern Dance Composition. Prerequisite: Approval of instructor. (Offered only in evening and summer.)

461-462 CHOREOGRAPHY (3,3) Choreographic studies on the advanced level using sonata, rondo, and fugue forms. Elements of performance. Choreography, staging, costumes, and presentation of a group dance. Prerequisite: 320.



During 1970-1971 school year "Physical Sciences" became two separate departments: Chemistry and Physics — see Addendum for Additional Information."

PHYSICAL SCIENCES

Professors: BAREHAM, COX, KASK, NEWMAN, PELHAM

Associate Professors: BLANKENSHIP, JOHNSON, MILIO, MOOREFIELD, RUBENDALL (Chairman), YARBROUGH

Assistant Professors: DIAHL, FREDERICK, HUANG, KREISEL, LOH

Instructors: CHEN, BRUMBAUGH, MARCUS

The Physical Sciences Department offerings provide opportunities for students to deepen and strengthen their understandings of basic concepts. A number of the courses require only the basic Physical Sciences 64.101 as prerequisite in order to allow a wide choice to students with only moderate interest in physical sciences. Students who will pursue scientific professions as teacher, researcher, industrial scientist, etc. should select courses to meet the requirements of the chemistry, natural science or physics major. Prospective secondary school science teachers are forewarned that certification requirements are not uniform throughout the city and state.

A student who chooses to take a physical science course to partially satisfy the Group II GENERAL EDUCATION REQUIREMENTS is free to select any course for which he has the necessary prerequisite.

Because of the relatively large credit hour requirement for chemistry, natural science or physics majors, students contemplating these should take at least one or two CHEMISTRY, MATHEMATICS or BIOLOGY courses required for these majors in the freshman year.

ADDITIONAL CREDIT FOR RESEARCH TO IMPROVE A COURSE

Exceptional students may be invited by the instructor of any course to assist him to improve the materials for that course and thereby earn one extra credit. Consult the instructor or Department Chairman for further information.

CHEMISTRY MAJOR

This major may be elected by students who intend to do graduate work in chemistry, to teach in secondary schools, to work in industrial, government and hospital laboratories, technical libraries, etc. Students who plan chemically oriented careers such as fundamental and industrial research, medicine,

dentistry, pharmacy, veterinary medicine, agriculture, and other allied fields, may also elect this major. Staff members will aid each student in designing a program to meet his special needs.

In addition to the general requirements for a bachelor's degree, the following courses are required of all chemistry majors: CHEMISTRY 22.103-104 or 101-102, 211-212, 231-232, 341-342, 422 (36 hours); BIOLOGY 14.101; PHYS 66.221-222 (or 66.211-212); Mathematics through 50.272 for a total of 60 semester hours. Prospective secondary school chemistry teachers will need 22 semester hours of education courses with 9 semester hours of electives. A foreign language is strongly recommended for those who intend to go to graduate school. German, Russian or French is required for a program accredited by the American Chemical Society.

CHEMISTRY COURSES (CHEM)

Lower Division – Undergraduate

22.101-102 GENERAL CHEMISTRY (4,4) Atomic and molecular structures and their relation to properties of matter; solutions; types of reaction, energetics, kinetics, equilibria, and the related study of some important metallic and non-metallic elements. Laboratory work involves individual quantitative experiments and semimicro qualitative analysis. Three lecture hours and one three-hour laboratory period. Prerequisite: High school algebra.

22.103-104 GENERAL CHEMISTRY FOR MAJORS (4,4) For chemistry majors and other qualified students. Essentially the same as CHEM 22.101-102 but a more rigorous treatment of problems and a more extensive study of the elements. Three lecture hours and one three-hour laboratory period. Prerequisite: Entrance examination or a grade of at least C in college algebra-trigonometry or the equivalent.

22.195 COURSE RESEARCH IN 100-LEVEL COURSES

22.211-212 ANALYTICAL CHEMISTRY (4,4) Elements of statistics; theoretical principles of chemical analysis; analysis of acids and bases, oxidizing and reducing agents, and some special materials; instruction in and practice with the spectro-photometer, potentiometric titrator, the polarograph, etc. Two lecture hours and two three-hour laboratory periods. Prerequisite: CHEM 22.104 or 22.102.

22.231-232 ORGANIC CHEMISTRY (4,4) Structure, reactions, preparation and properties of the compounds of carbon, as well as mechanisms of organic reactions. Laboratory techniques, synthesis of typical organic compounds and modern methods of organic qualitative analysis. Three lecture hours and one four-hour laboratory period. Prerequisite: CHEM 22.104 or 22.102.

22.295 COURSE RESEARCH IN 200-LEVEL COURSES

Upper Division – Undergraduate and Graduate

22.341-342 PHYSICAL CHEMISTRY (4,4) Solid, liquid and gaseous state principles treated with more rigor than possible in elementary courses. Mathematical analysis of chemical systems. Three lecture hours and one three-hour laboratory period. Prerequisite: CHEM 22.211, MATH 50.272 or concurrently, PHYS 66.222 or 66.212.

22.351-352 BIO-CHEMISTRY (4,4) Structure and properties of the constituents of living matter, including proteins, carbohydrates, lipids, nucleic acids, enzymes and vitamins. Chemical reactions, properties and the mechanisms involved in their synthesis and metabolism associated with biological processes. Three lecture hours and one three-hour laboratory period. Prerequisite: CHEM 22.231.

22.381 MODERN CONCEPTS OF CHEMISTRY (4) Principles of modern chemistry including some inorganic, organic, analytical, and physical chemistry in an integrated treatment. Primarily for secondary school science teachers. Three lecture hours and one three-hour laboratory period. May not be counted for credit by chemistry majors since the course content is covered elsewhere in their curriculum. Prerequisite: CHEM 22.102 or 22.104 and two other science courses.

22.382 STATISTICAL TREATMENT OF CHEMICAL DATA (3) Designed to develop skill in chemistry students and those in related fields in the application of simple statistical procedures and tables to laboratory data. One two-hour lecture and one three-hour laboratory period. Prerequisite: Sophomore standing or higher; high school algebra; an aptitude for logic and arithmetic is desirable. A course in quantitative analysis is recommended.

22.395 COURSE RESEARCH IN 300-LEVEL COURSES

22.412 INSTRUMENTAL ANALYTICAL CHEMISTRY (4) Instruments introduced in CHEM 22.212 are reconsidered with the application of Physical Chemistry CHEM 22.341. Interpretation of typical data generated by the use of NMR, ESR, MS, and x-rays, and other recent developments in instrumental methods of analysis. Two one-hour lectures and two three-hour laboratory periods. Prerequisite: CHEM 22.212, CHEM 22.341. PHYS 66.311 is recommended.

22.422 INORGANIC CHEMISTRY (4) Nuclear and extranuclear structure, molecular orbital and ligand field theories, aqueous and non-aqueous reactions, coordination chemistry, inorganic synthesis, modern instrumentation, etc. Three lecture hours and one three-hour laboratory period. Prerequisite: CHEM 22.342 or concurrently.

22.431 ADVANCED ORGANIC CHEMISTRY LABORATORY (2) Methods of organic synthesis. Emphasis on general types of organic reactions, relying, in part, on original literature sources. Includes considerable individual instruction in laboratory techniques and in the use of equipment and instruments. Two three-hour laboratory periods. Prerequisite: CHEM 22.232.

22.432 ADVANCED ORGANIC CHEMISTRY (3) Review of fundamentals. Advanced treatment of selected topics in organic chemistry. Typical subject matter areas: (1) reaction mechanisms; (2) structure elucidation; (3) stereochemistry; (4) linear free energy relationships; (5) molecular orbital calculations. Three lecture hours. Prerequisite: CHEM 22.232, CHEM 22.342 or concurrently.

22.491 INTRODUCTION TO RESEARCH IN CHEMISTRY (1-3) An individual laboratory and/or library investigation in research interest of an instructor. May be repeated for credit as CHEM 22.492, 22.493, 22.494, etc. At the completion of a project, the student is required to give a public seminar on the work done and the principles involved. The vote of the chemistry faculty present in the seminar will be considered by the research supervisor in assigning final grades. Prerequisite: Consent of instructor.

22.495 COURSE RESEARCH IN 400-LEVEL COURSES

NATURAL SCIENCE MAJOR

The program is designed to give a broader view of the sciences than is obtained in a traditional undergraduate major in a single science. This is done at the sacrifice of depth and students should therefore be aware that this major will not prepare them for graduate work in a single science. Course requirements are: BIOLOGY 14.101, 105, 109; CHEMISTRY 22.101-102; 211 or 231; MATHEMATICS 50.115; PHYSICAL SCIENCES 64.21, 211; PHYSICS 66.211-212; BIOLOGY 14.291 or 14.491 or PHYSICAL SCIENCES 64.401; biological or physical sciences electives (including one field course) for eleven credit hours, for a total of 54 hours in physical sciences, biological sciences and mathematics.

Prospective secondary school teachers of general science should elect this major. Students should plan their programs to meet the certification requirements of the area in which they plan to teach.

PHYSICAL SCIENCE COURSES (PHSC)

Lower Division – Undergraduate

64.101 PHYSICAL SCIENCE I (4) Principles of classical physics and chemistry and origin of quantum physics and applications of principles to astronomy. Three lecture hours and one three-hour laboratory period.

64.121 GENERAL GEOLOGY (3) Composition and structure of the earth. The internal and external forces acting upon it and the surface features resulting. Laboratory studies of the common rocks and minerals, geologic and topographic maps and aerial photographs. Field studies in the Baltimore area. Two lecture hours and one two-hour laboratory period.

64.195 COURSE RESEARCH IN 100-LEVEL COURSES

64.201 CLASSICAL AND CONTEMPORARY WRITINGS IN THE PHYSICAL SCIENCES (1) Discussion of writings of eminent scientists and scholars — ancient and modern — in the physical sciences as they pertain to broad philosophical questions. Prerequisite: A course in Physical Science.

64.202 PHYSICAL SCIENCE II (4) A course for non-science majors who are interested in more rigorous and quantitative work in the physical sciences. Enough non-rigorous calculus will be taught with the help of a programmed text so applications in classical thermodynamics will be possible. Other topics: rigorous development of the temperature concept; heat transfer and engines. Three lecture hours and one three-hour laboratory period. Prerequisite: PHSC 64.101 and consent of instructor. Only high school algebra assumed.

64.203 PHYSICAL SCIENCE III (3) Principles of hydrostatics, mechanics, electricity and electronics through a study of selected practices in the transmission of energy and intelligence. Two lecture hours and one two-hour laboratory period. Prerequisite: PHSC 64.101.

64.204 PHYSICAL SCIENCE IV (3) Principles of fluid dynamics, aeronautics, astronautics, optics and astronomy. Two lecture hours and one two-hour laboratory period. Prerequisite: PHSC 64.101.

64.211 GENERAL ASTRONOMY (3) Science of astronomy; investigations and theories concerning the solar system, galaxies and the universe. Two lecture hours and one two-hour laboratory period. Prerequisite: PHSC 64.101.

64.222 GEOMORPHOLOGY (3) Origin and evolution of surface features of the earth as controlled by the interaction of geologic structures and erosional processes. Field work in the Maryland area. Two lecture hours and one two-hour laboratory period. Prerequisite: PHSC 64.101, 64.121.

64.295 COURSE RESEARCH IN 200-LEVEL COURSES

Upper Division – Undergraduate and Graduate

64.401 ADVANCED LABORATORY IN PHYSICAL SCIENCE (2) Exacting Laboratory work of an advanced nature under the guidance of the Physical Sciences Department staff. Each student will present and defend his work at a seminar. Prerequisite: Consent of instructor.

64.405 FUNDAMENTAL CONCEPTS IN THE EARTH SCIENCES (3) Principles of astronomy, geology and related earth sciences. Methods of investigation employed by earth scientists. Observations in the planetarium and field studies in the Baltimore area. Two lecture hours and one two-hour laboratory period. Prerequisite: PHSC 64.101 or equivalent. No credit allowed if student has taken PHSC 64.211 (Astronomy) and/or PHSC 64.121 (Geology).

64.495 COURSE RESEARCH IN 400-LEVEL COURSES

PHYSICS MAJOR

The major program is designed to meet the needs of three groups of students, those planning (1) to be physics teachers in the secondary schools, (2) to enter graduate study in physics, and (3) to be physicists in non-teaching professions. All students will be expected to complete a foundation curriculum consisting of PHYS 66.221-222 (or 66.211-212), 66.311, 66.321 and two from 66.385-387, BIOL 14.101, CHEM 22.103-104 (or 22.101-102), and mathematics through MATH 50.371. Students in group (1) will need to take two from 66.301, 302, 305-306 and 22 semester hours of education courses. Students in groups (2) and (3) are required to have PHYS 66.301, 302, 305, 306, one year foreign language, the other Advanced Laboratory from PHYS 66.385-387, PHYS 66.401-402, and PHYS 66.471-472, completing their requirements for graduation with general electives and such physics electives as may be added when need develops or are available under the Cooperative Educational Program of the State Colleges of Maryland.

PHYSICS COURSES (PHYS)

Lower Division – Undergraduate

66.211-212 GENERAL PHYSICS (4,4) For Arts and Science, Biology, and Natural Science Majors: Mechanics, heat, and sound are considered in the first semester; light, electricity, magnetism and a brief introduction to modern physics in the second. Three lecture hours and one three-hour laboratory period. Prerequisite: MATH 50.115 or consent of instructor.

66.221-222 GENERAL PHYSICS (4,4) For Chemistry, Mathematics, and Physics Majors: Mechanics, heat, and sound are considered in the first semester; light, electricity, magnetism and a brief introduction to modern physics in the second. Three lecture hours and one three-hour laboratory period. Prerequisite: MATH 50.271 or concurrently.

66.295 COURSE RESEARCH IN 200-LEVEL COURSES

Upper Division – Uppergraduate and Graduate

66.301 MECHANICS (3) Systems of coordinates and kinematic components of motion; Newtonian dynamics of particles and linear systems, including planetary motion and oscillations in damped and undamped systems; virtual work; generalized coordinates and Lagrange's equations; Hamilton's principle with elementary applications of least action, varying action and the canonical equations. Some nonlinear effects will be introduced. Three lecture hours. Prerequisite: PHYS 66.222 or 66.212. MATH 50.272.

66.302 THERMODYNAMICS AND KINETIC THEORY (3) Principles and laws of classical thermodynamics applied to simpler irreversible processes, including chemical, elastic, electric and magnetic phenomena; thermodynamic functions and Maxwell's relations; the conservation equations in elementary kinetic theory; fluctuations and irreversible transfer effects. This course may be taken concurrently with PHYS 66.212 or 66.222 by permission. Three lecture hours. Prerequisite: PHYS 66.212 or 66.222.

66.305 ELECTRICITY AND MAGNETISM (3,3) The first semester covers the integral theorems of Gauss and Stokes as applied to electrostatics and magnetostatics; diamagnetism and paramagnetism; steady and transient current effects; alternating currents; conduction in gases, photo-electricity; and electron theories of solid state phenomena. Three lecture hours. Prerequisite: PHYS 66.212 or 66.222. MATH 50.272.

66.306 PHYS 66.305 is a prerequisite to PHYS 66.306 which may be taken as a separate course during the second semester. The classic treatment of Maxwell-Lorentz electromagnetic and propagation effects; the special theory of relativity; introduction to microwaves and wave guides; plasma physics and magnetohydrodynamics. Three lecture hours.

66.311 MODERN PHYSICS (3) The specific details of this course will be changed from time to time as necessitated by student interests and needs. In general, the intermediate principles and applications of relativity, quantum physics, elementary particles, nuclear physics and solid state theory will serve as the foundation for additional specialized developments of current interest. Three lecture hours. Prerequisite: PHYS 66.222 or 66.212. MATH 50.272.

66.313 HISTORY AND PHILOSOPHY OF PHYSICS (2) The works of Sarton, Cohen, Singer and Dampier on the history and significance of physical concepts. The philosophical concepts of Bridgman, Russell, Heisenberg and other contemporaries interpreted in the historical development. Two lecture hours.

66.321 INTRODUCTORY MATHEMATICAL PHYSICS (3) As the mathematical maturity of the students will allow, selected topics will be examined such as the generalized expressions for forces and potentials, vector analysis, applications of Fourier series and complex variables, and solutions of the harmonic oscillator and wave equations. Three lecture hours. Prerequisite: PHYS 66.222 or 66.212, MATH 50.371 or concurrently.

66.335 BASIC ELECTRONICS (4) Circuit components, characteristics of semiconductors, electrical measurements, method of circuit analysis, electronic devices. Two lecture hours and two three-hour laboratory periods. Prerequisite: 66.212 or 66.222 or consent of instructor.

66.385-387 ADVANCED PHYSICS LABORATORY (3,3,3) The three, single-semester courses may be taken independently subject to the requirements as specified for each. Three laboratory hours and three hours of independent work.

66.385 MECHANICS AND HEAT (3) Equilibrium of rigid bodies; moments of inertia; laws of angular motion; physical and torsional pendulums; servomechanisms; surface tension; vapor pressure and hygrometry; viscosity of fluids; continuous flow calorimetry; thermal conductivity; black-body radiation; acoustics. Prerequisite: PHYS 66.301 or concurrently.

66.386 MODERN PHYSICS (3) Millikan oil drop experiment, e/m measurement, photoelectric effect, electron diffraction, Franck-Hertz experiment, radioactivity, lasers, soft x-ray and additional specialized developments of current interests. Prerequisite: PHYS 66.311 or concurrently.

66.387 ELECTRICITY AND OPTICS (3) Kirchoff's laws; potential differences; galvanometer measurements; resistance thermometers, fuel cells; thermoelectricity; indices of refraction — of lenses; interference effects; spectroscopy. PHYS 66.305 is a requirement which may be taken concurrently.

66.395 COURSE RESEARCH IN 300-LEVEL COURSES

66.401-402 PHYSICS SEMINAR (1, 1) Students participate in colloquia on topics of current interests in physics research under guidance of instructor. One lecture hour. Prerequisite: Senior standing or consent of instructor.

66.411 PHYSICAL OPTICS (3) Electromagnetic theory of light, wave solutions, interference, diffraction, scattering, radiation from coherent and incoherent sources, elementary theory of masers and lasers. Three lecture hours. Prerequisite: PHYS 66.306 or consent of instructor.

66.435 ELECTRONICS (3) Principles of transistors with emphasis on their design and construction and an introduction to logic circuits. Two lecture hours and one two-hour laboratory. Prerequisite: PHYS 66.306, 66.335.

66.471 PHYSICAL STATISTICS AND INTRODUCTORY QUANTUM MECHANICS (3) Distribution functions, the Fermi-Dirac and Einstein-Bose statistics, fluctuations, photonparticle interactions, the need for a quantum theory, the Schrödinger equation, the Pauli theory of electron spin, electronic structure of matter. Three lecture hours. Prerequisite: PHYS 66.301, 302, 306, 311 MATH 50.372 or PHYS 66.321.

66.472 PHYSICAL STATISTICS AND INTRODUCTORY QUANTUM MECHANICS (3) Solution of Schroedinger's equation, the potential barrier problem, the harmonic and non-harmonic oscillator, perturbation theory, uncertainty and complementarity, the probabilistic interpretation, nuclear transformations, conservation laws, symmetry and parity, Dirac's theory of the electron. Three lecture hours. Prerequisite: PHYS 66.471.

NATURAL SCIENCE COURSES (BIOL)

Descriptions of these courses will be found under the Biological Sciences Department listings:

BIOL 14.301 FIELD NATURAL SCIENCE (4)

BIOL 14.310 ENVIRONMENTAL CONSERVATION (4)

SCIENCE EDUCATION COURSES (SCIE)

The following courses are taught by instructors in the Departments of Physical Sciences and of Biological Sciences. Course descriptions will be found under the Education Department listings:

EDUC 26.323 EARLY CHILDHOOD EDUCATION PROFESSIONAL BLOCK 1 — SCIENCE

SCIE 76.371 TEACHING SCIENCE IN EARLY CHILDHOOD

SCIE 76.375 TEACHING SCIENCE IN THE ELEMENTARY SCHOOL

SCIE 76.379 TEACHING SCIENCE IN THE SECONDARY SCHOOL

SCIE 76.488 (SUMMERS) AEROSPACE EDUCATION WORKSHOP

SCIE 76.585 SEMINAR IN ELEMENTARY SCHOOL SCIENCE

ELEMENTARY SCHOOL SCIENCE CONCENTRATION

For prospective elementary school teachers who wish a somewhat broader background in science than that obtained from the required courses. Also open to other students, but arts and science and secondary education students should be aware that this program does not provide them with the "major" they must have in order to earn a degree. Course requirements are: BIOLOGY 14.101, 105, 109, 301; PHYSICAL SCIENCES 64.101, 121, 202, 203, 204, 211 for a total of 36 hours. Students electing this concentration are urged to take MATHEMATICS 50.115.

PSYCHOLOGY

Professors: CASSATT (*Chairman*), NEULANDER, SAXTON

Associate Professors: DAVIS, GROENHEIM, HILL, LASSEN, SIEGEL, SUYDAM

Assistant Professors: FURUKAWA, GEELHAAR, MILLER, RASKIN, D. SIEGEL, SMITH, WAGMAN

Instructors: LEYHE, SANDERS

Visiting Lecturer: RAVAL

A student may elect either a major (31 hours) or minor (23 hours) in psychology programs aimed at understanding and predicting behavior. Electives beyond the basic requirements facilitate preparation for: (1) graduate work in psychology and in guidance, (2) training in special and in general education, and (3) vocations requiring a liberal arts background.

PSYCHOLOGY MAJOR

The minimum requirements for a major in psychology are 70.101, 70.111, 70.261, and 70.305, along with an approved program of 18 elective hours in psychology.

PSYCHOLOGY MINOR

The minimum requirements for a minor in psychology are 70.101, 70.111, 70.261, and 70.305, along with an approved program of 10 elective hours in psychology.

PSYCHOLOGY HONORS

Admission is granted at the end of the sophomore year or beginning of the junior year to students who have the following qualifications: Grade point average of at least 3.00 overall and 3.25 in major field, recommendations from Departmental Chairman and advisor, and approval by the College Honors Program Board. The minimum requirements for graduation with honors in psychology are grade point averages of 3.00 overall and 3.50 in major field and completion of 70.385, 70.485 and 70.499.

PSYCHOLOGY COURSES (PSYC)

Lower Division – Undergraduate

70.101 (101) GENERAL PSYCHOLOGY (3) Methods and principles. Attention to: Measurement, experimentation, sensation, perception, learning, emotion, thinking, remembering, personality, adjustment, development and individual differences. Fall, Spring, Summer.

70.106 (104) APPLIED PSYCHOLOGY (3) Psychologists' contributions to education, medicine, law, mental health and business. Application to problems in these areas. Lectures and field trips. Spring.

70.111 (110) BEHAVIORAL STATISTICS (3) Distributions and graphs, notation, levels of measurement, percentiles, measures of central tendency and variability, principles of probability, the normal curve, standard scores, sampling theory, hypothesis testing, significance of differences, correlation and prediction, Chi square. Emphasis on problems and applications relevant to the behavioral sciences. Fall, Spring, Summer.

70.201 (203) EDUCATIONAL PSYCHOLOGY (3) The learning process and related concepts; human development; individual differences; measurement and evaluation; personality and adjustment. Prerequisite: 70.101. Fall, Spring, Summer.

70.211 (205) CHILD PSYCHOLOGY (3) Theories and research methods of child behavior. Development of major psychological functions. Prerequisite: 70.101. Fall, Spring, Summer.

70.221 (322) SOCIAL PSYCHOLOGY (3) The structure and function of groups. Recent advances in sociology, anthropology and psychiatry as related to psychology. Prerequisite: 6 hours.

70.230 (420) MENTAL HYGIENE (3) Adjustment as related to mental health, problems to which adjustment is made, and the nature of conflict. Prerequisite: 70.101. Spring.

70.261 (210) EXPERIMENTAL PSYCHOLOGY I (4) The experimental method and its application to recent problems in psychological research; introduction to experimental design and inference; animal and human learning, perception, social, personality, maturation. Three hours lecture, two hours laboratory per week. Prerequisites: 70.101 and 70.110. Fall, Spring.

70.262 (211) EXPERIMENTAL PSYCHOLOGY II (4) The experimental analysis of behavior. Introduction to independent research and to computer technology. Three hours lecture, two hours laboratory per week. Prerequisite: 70.261. Spring.

Upper Division – Undergraduate and Graduate

70.305 (308) PSYCHOLOGY OF LEARNING (3) Analysis of selected problems in both human and animal learning including reinforcement, punishment, verbal learning and verbal behavior. Prerequisite: 70.210. Fall.

70.306 (309) ADVANCED LEARNING (3) Reading, lectures and discussions from contemporary learning theory and research. Prerequisite: 70.305. Spring.

70.315 (303) MOTIVATION (3) Theories of motivation, motivational antecedents, and the consequences of such antecedents on instrumental behavior, learning and perception. Prerequisites: 6 hours. Fall.

70.321 (407) ADOLESCENT PSYCHOLOGY (3) Physical, emotional, intellectual development during adolescence; social development and heterosexuality; adolescent personality; problems of adjustment; juvenile delinquency. Prerequisite: 70.211. Fall, Spring.

70.330 (304) PSYCHOLOGY OF INDIVIDUAL DIFFERENCES (3) Individual differences in human traits and characteristics; methodology, basic principles, and major findings in research. Prerequisites: 70.101 and 70.111. Spring.

70.350 (305) PERSONALITY (3) Theoretical and practical approaches to the study of personality. Introduction to psychodynamics and to methods and materials of assessment. Prerequisite 6 hours. Spring.

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70.361 (306) ABNORMAL PSYCHOLOGY (3) Disordered personal reactions to life. Organic and functional phenomena plus therapeutic techniques. Prerequisite: 9 hours. Fall.

70.370 (331) FOUNDATIONS OF REHABILITATION COUNSELING (3) The development of rehabilitation programs; their legal basis and historical background. The role of medical, psychological, educational and community resources in the rehabilitation program are explored. Client eligibility, determination, and counselor responsibilities will be reviewed. Spring. Prerequisite: 70.101.

70.381 (391) READINGS IN PSYCHOLOGY (1-2) (Honors) A survey of relevant research literature under the guidance of a staff member who will direct the students' research. Prerequisite: 70.261, Honors approval or consent of instructor. Fall, Spring.

70.385 (385) SEMINAR IN PSYCHOLOGY (1-3) (Honors) Survey and critical evaluation of modern literature pertaining to selected problems in Psychology. Prerequisite: 70.261, Honors approval, or consent of instructor. Fall, Spring.

70.411 (410) TESTS AND MEASUREMENTS (3) Psychological and educational testing and evaluation. The construction, administration, interpretation and use of the various evaluative devices of aptitude and achievement. Prerequisite: 70.101 and 70.111. Fall, Spring, Summer.

70.416 (411) PERSONALITY MEASUREMENT (3) A continuation of 70.411 that will emphasize the use and interpretation of instruments for measuring attitudes, interests and related aspects of personality. Instruments studied will include paper-pencil inventories, projective devices and observational procedures. Prerequisite: 70.411 and 70.230. Spring.

70.420 (415) INDIVIDUAL INTELLIGENCE TESTING (3) Construction, standardization, administration and scoring of Stanford-Binet and the Wechsler Individual Intelligence Tests. Prerequisite: 12 hours including 70.411. Spring.

70.425 (423) INTRODUCTION TO AND ANALYSIS OF INTERPERSONAL RELATIONSHIPS (3) Current concepts of the helping relationship and an exploration of the conditions that facilitate its effectiveness. Prerequisite: 70.101. Fall and Spring.

70.430 (426) SYSTEMS AND TECHNIQUES OF COUNSELING PRACTICE (3) Review and application of current theoretical approaches to the helping relationship. Prerequisites: 70.425 and 70.411. Spring.

70.431 GROUP DYNAMICS (3) Intensive study of group interactions with emphasis upon reciprocal group influence of behavior. Prerequisite: 70.221 or consent of instructor. Fall.

70.435 (427) SUPERVISED FIELD EXPERIENCE (3-6) Placement in a community service agency to familiarize the student with its current practices. Supervised client contact will be provided. Prerequisites: 70.370, 70.430 and departmental consent.

70.441 INFORMATION SERVICE IN COUNSELING AND GUIDANCE (3) Educational and vocational resources. Evaluation, classification and use of such information. Prerequisite: 70.101. Spring, Summer.

70.460 (409) COMPARATIVE PSYCHOLOGY (3) The differences in behavior between species will be compared within a framework of learning, ethology, and neuropsychology. Prerequisite: 70.261. Spring.

70.465 (412) PHYSIOLOGICAL PSYCHOLOGY (4) The physiological basis of behavior, with consideration of receptor, central and effector structures and function. Three hours lecture, 2 hours laboratory per week. Prerequisite: 70.261. Fall.

70.471 (460) INTRODUCTION TO THE EXCEPTIONAL CHILD (3) Children with a typical, physical, mental, social and emotional development, including the physically handicapped, the mentally retarded, the gifted, and emotionally disturbed children. Prerequisite: 70.201 or 70.211. Fall.

70.480 (488) SYSTEMS OF PSYCHOLOGY (3) Schools of psychology with their theoretical and methodological approaches. Prerequisite: At least a junior psychology major and consent. Spring.

70.485 (486) EXPERIMENTAL DESIGN (4) (Honors) Design and analysis — Analysis of variance (completely randomized design, repeated measurement designs, etc.), multiple comparisons, nonparametrics, general problems related to sampling, experimental effects, etc. Prerequisite: 70.111. Honors approval or consent of instructor. Fall, Spring.

70.491 (490) INDEPENDENT INVESTIGATION IN PSYCHOLOGY (3) An opportunity for especially qualified students to undertake research problems according to their interest and training under the direction of a staff member. Prerequisite: 70.261 and consent of department. Fall, Spring.

70.499 (499) SENIOR THESIS IN PSYCHOLOGY (4) (Honors) Independent research on special problems in Psychology or closely related fields. Prerequisite: 70.261, 70.485, Honors approval. Fall, Spring.

Graduate Division

70.511 (501) DEVELOPMENTAL PSYCHOLOGY (3) Psychological structures and functions in human development. Theoretical and research approaches. Prerequisite: 70.201 or equivalent. Fall, Spring, Summer.

70.521 (505) ADVANCED EDUCATIONAL PSYCHOLOGY (3) Survey of current research in Child Psychology, Learning, Mental Hygiene, and Tests & Measurements. Emphasis on critical analysis of studies. Prerequisites: 70.511. Fall, Spring, Summer.

70.531 (506) ADVANCED ABNORMAL PSYCHOLOGY (3) Current and historical perspectives of psychopathology. Emphasis on varied approaches in contemporary schools. Methods of assessment and treatment. Prerequisites: 70.361 or equivalent. Fall.

70.540 (553) MENTAL HYGIENE IN EDUCATION (3) Principles of mental hygiene and their application to the educational setting. Major emphasis on wholesome personality development. Prerequisites: 70.511. Spring.

70.550 (557) DIAGNOSTIC TECHNIQUES IN EDUCATION (3) Use of standardized and teacher-constructed instruments for diagnostic and instructional purposes. Prerequisites: 70.511, 70.411 or equiv. Spring.

70.560 (513) PSYCHODYNAMICS OF BEHAVIOR (3) Description of the manifestation and consequences of the interaction of the emotional needs and the behavioral syndromes. Prerequisites: 70.350 and 70.361 or 70.230. Spring.

70.563 SYSTEMS OF PSYCHOTHERAPY (3) Course is designed to acquaint students with the more prominent schools of psychotherapy. Particular emphasis is placed on the psychotherapeutic aspect of educational and clinical settings. Prerequisite: 70.350, 70.361 or 70.230, 70.531.

70.570 (519) REFERRAL RESOURCES FOR THE SCHOOL AGE CHILD (3) A study of referral services for the enhancement of the emotional, vocational, and the behavioral adaptation of children in need of services beyond the classroom situation. The course attempts to give direct knowledge to the student of all such specialized facilities both school and community sponsored. Prerequisite: 70.511. Summer.

70.591 (515) PROJECTIVE TECHNIQUES I (3) This is the first of a two course sequence dealing with projective techniques. The first semester emphasizes an introduction to the administration and scoring of projectives in current clinical use. Credit will be awarded only upon completion of the first and second semester of this sequence. Prerequisites: Graduate status and permission of the instructor. Fall.

70.592 (516) PROJECTIVE TECHNIQUES II (3) The second of a two semester sequence in projective techniques. This course emphasizes the interpretation of projective data and diagnostic implications. Particular emphasis will be placed on the evaluation of learning problems. Prerequisites: 70.591 and permission of the instructor. Spring.

70.605 (511) PRINCIPLES OF GUIDANCE (3) Aims at establishing a philosophy and gaining a knowledge of the principles of guidance. Includes an introduction to the literature of the field. Prerequisites: 70.511 or equivalent. Fall, Spring, Summer.

70.607 (520) OCCUPATIONAL INFORMATION (3) Provides students with knowledge of educational and vocational opportunities and community referral sources essential to a sound guidance program. Includes evaluation, classification and use of such information in the instructional program. Group guidance, counseling and placement. Prerequisite: 70.605.

70.611 (512) ANALYSIS OF THE INDIVIDUAL (3) Techniques available in studying the individual. Emphasizes data in the areas of vocational, educational and personal adjustment. Prerequisites: 70.605 and 70.411. Fall, Spring, Summer. (70.605 may be taken concurrently.)

70.615 (510) TECHNIQUES OF COUNSELING (3) Counseling and therapy techniques used by counselors and other professional personnel working with children and adults. Prerequisites: 70.430 or equivalent Spring, Fall, Summer.

70.621 (514) GROUP TECHNIQUES IN GUIDANCE AND COUNSELING (3) The selection, organization and effective use of group guidance materials and techniques in providing for the common needs of groups of students in making more effective educational, occupational, social and personal adjustment. Prerequisites: 70.430 and 70.441. Fall.

70.627 (527) USE OF TESTS IN COUNSELING (3) Practice in the use and analysis of techniques for understanding the individual with emphasis upon standardized procedures used in the public schools. Prerequisites: 70.611. Fall.

70.630 (517) COUNSELING THE ELEMENTARY SCHOOL CHILD (3) Study of the dynamics of child behavior, techniques of assessing and counseling. Study of the family, school, and community structures and their effect on the child. Prerequisites: 70.430. Spring.

70.635 (530) COMMUNICATION MEDIA WITH CHILDREN I (3) Introduction to the methods and materials used in diagnostic and therapeutic approaches to children. Use of toys, art media and play activities emphasized. Prerequisites: 70.615 or equivalent. Fall.

70.636 (531) COMMUNICATION MEDIA WITH CHILDREN II (3) A continuation of Psyc 530 with emphasis upon practical application of the theoretical principles involved in the psychodiagnostic and therapeutic use of play media. Use of the play-room and its materials will be emphasized. Prerequisites: 70.645 and 70.635. Spring.

70.645 (523) COUNSELING PRACTICUM I (3) Supervised experience in educational, vocational and personal counseling. Prerequisites: 615 plus consent of the department. Fall, Spring, Summer. Credit will be granted for this course upon completion of Psychology 646 or Psychology 635-636.

70.646 (525) COUNSELING PRACTICUM II (3) Field experience in educational, vocational and personal counseling. Prerequisites: 70.645 plus consent of the department. Fall, Spring. Students registering for this course will be required to have one half day (1 p.m. to 5 p.m.) free for Practicum assignments.

70.651 (521) CLINICAL PRACTICUM IN SCHOOL PSYCHOLOGY I (3) Provides an opportunity to participate in diagnostic, remedial and therapeutic planning as well as follow-up studies under supervision of practicing clinical psychologists. Prerequisites: Permission of the instructor. Summer.

70.652 (522) CLINICAL PRACTICUM IN SCHOOL PSYCHOLOGY II (3) Off campus placements will be arranged for each student. Supervision from a practicing clinical psychologist will be conducted on a group as well as individual basis. Prerequisites: Clinical Practicum I. Fall.

70.656 (595) SEMINAR IN COUNSELING — ELEMENTARY (3) Analysis of research trends; examination of critical issues, reports of student research projects, professional problems and ethics. Prerequisites: 70.645. Summer.

70.660 (596) SEMINAR IN COUNSELING — SECONDARY (3) Analysis of research trends, examination of critical issues, reports of student research projects, professional problems and ethics. Prerequisites: 70.645. Summer.

70.690 (591) PRO SEMINAR IN SCHOOL PSYCHOLOGY (3) Consideration of current practices and trends in school psychology. Each student will do a study of interest to him and submit a formal written paper. Prerequisites: Approval by the dept. Spring.

70.699 THESIS (3) Optional for students in Master of Education for School Psychologists program.

SOCIAL SCIENCE

Coordinator: JOSEPH A. FALCO

This is an interdepartmental major made up of the Departments of Economics, Geography, History, Political Science, and Sociology. It is designed for those students who do not wish to be confined to a major in a single field of social science, but are interested in a broad education, transcending traditional departmental boundaries.

This program is useful for those students who plan to enter graduate school upon their graduation from Towson State; or those who plan to enter professional schools, such as law school or social work programs. It is particularly designed for students planning to teach social studies at the secondary school level.

The major offers the student the choice of two distinct social science programs: A social science major in liberal arts or a social science major in secondary school teaching.

Requirements for the Social Science Major in Liberal Arts:

History: 40.263, 264, 145, 146 (12 hours)

Geography: 34.101, 102 (6 hours)

Political Science: (6 hours)

Sociology: (6 hours)

Economics: (6 hours)

Plus: 30 hours of upper division courses in three Social Science Departments of the student's choice.

The student may earn either a Bachelor of Science degree or a Bachelor of Arts, the language requirement for which is met by completing the Intermediate Course or equivalent of a modern foreign language.

Requirements for the Social Science Major in Secondary Teaching:

History: 40.263, 264, 145, 146 plus 6 hours of upper division courses (18 hours)

Geography: 34.101, 102 (6 hours)

Political Science: (6 hours)

Sociology: (6 hours)

Economics: (6 hours)

Plus: 12 hours of upper division courses in any and/or all five Social Science Departments.

SOCIOLOGY

Professors: HOJJATI, KRANZLER

Associate Professors: KANDEL, TOLAND (Chairman)

Assistant Professors: FISHER, SMITH, WOLF

Instructors: ADAMS, COCKEY, JONES, MONK, WIRAK

The Department of Sociology offers a major and a minor in sociology. The purpose of the major is to acquaint the student with the social structure and dynamics of human behavior in its varied social environments, to prepare the student for graduate study in sociology and related fields, and to give the student the opportunity to become involved in social research and to observe its problems in action.

Requirements of the Major

Requirements for a major in sociology are thirty semester hours, including Introduction to Sociology (80.101); Research Methods (80.495); Sociological Theory (80.407); Behavioral Statistics (70.110); and eighteen hours of elective courses offered by the Sociology Department. Students planning to attend graduate school are strongly urged to take Seminar in Sociology (80.485) and Independent Research (80.499).

Requirements for the Minor

Requirements for a minor in sociology are eighteen hours, including Introduction to Sociology (80.101); Sociological Theory (80.407); and twelve hours of elective courses offered by the Department of Sociology.

SOCIOLOGY COURSES (SOCI)

Lower Division — Undergraduate

80.101 INTRODUCTION TO SOCIOLOGY (3) Sociological concepts, theories, methods; a study of society and culture; the influence of the social environment on individual behavior.

80.105 INTRODUCTION TO ANTHROPOLOGY (3) A general survey of the field of anthropology; the basic principles of physical anthropology, ethnography, archaeology.

80.203 THE FAMILY (3) The family as the basic group in human societies; its development; its relation to other social institutions; the family in modern industrial societies. Prerequisite: SOCI 80.101.

80.207 CULTURAL ANTHROPOLOGY (3) Introduction to social and cultural anthropology; cultural theory, social structure, human ecology, language and culture, technology, religion, art, and literature. Prerequisite: SOCI 80.101 or Anthropology SOCI 80.105.

80.231 SOCIAL PROBLEMS (3) Major contemporary social problems; special emphasis on social maladjustment and disorganization; the problem of adjustment to social change. Prerequisite: SOCI 80.101.

Upper Division – Undergraduate and Graduate

80.303 SOCIAL WELFARE (3) Historical development; philosophy and theory; processes developed and fields of social work; Federal, state and community programs. Prerequisite: SOCI 80.101.

80.342 SOCIAL STRATIFICATION (3) The nature of social stratification; relationship of social mobility to social organization; social class structure in traditional and dynamic societies. Prerequisite: SOCI 80.101.

80.344 URBAN SOCIOLOGY (3) Historical development and organization of urban communities; rise and dominance of the modern city; relationship between cities and social behavior; problems and adjustment. Prerequisite: SOCI 80.101.

80.345 SOCIAL ORGANIZATION (3) An analysis of the social structure of human groups; the processes leading to the formation, stability, instability, and changes of social organizations. Prerequisite: SOCI 80.101.

80.346 POLITICAL ANTHROPOLOGY (3) Comparative political institutions and behavior among contemporary non-literate societies. Theoretical problems of social control, state and non-state systems, symbolic aspects of power, levels of political integration, and warfare. Prerequisite: 80.101 or 80.105.

80.347 COMMUNITY ORGANIZATION (3) The organization of the community as a vehicle for identifying and meeting human needs; processes and techniques of community planning and development, traditional and contemporary. Prerequisite: SOCI 80.101.

80.363 INDIVIDUAL AND SOCIETY (3) A social psychological approach to the interrelationships of the individual and his social and cultural environment; behavioral characteristics resulting from social experience. Prerequisite: SOCI 80.101.

80.364 RELIGION, MAGIC AND WITCHCRAFT (3) The world view, beliefs, and rituals of selected non-literate peoples considered with reference to religion as a universal category of human culture. Prerequisites: 80.101 or 80.105.

80.365 ETHNOGRAPHY OF NORTH AMERICA (3) A comparative description and interpretation of native American Indian culture. Prerequisite: SOCI 80.101 and 80.207.

80.381 MINORITY GROUPS (3) An examination of intergroup life as an aspect of society; conflicts between races, ethnic groups, and minorities; prejudice, segregation and integration. Prerequisite: SOCI 80.101.

80.382 FIELDS AND METHODS OF SOCIAL WORK (3) Introduction to the knowledge base and theory of professional social work; the agency as setting; practical methods and techniques; significance of day to day occurrences in agencies. Prerequisite: 80.303.

80.383 CRIMINOLOGY (3) The nature of crime; factors underlying criminal behavior; police, courts, law, and correctional institutions. Prerequisite: 80.101.

80.386 JUVENILE DELINQUENCY (3) A study of delinquency; the process of socialization and delinquent behavior in society; prevention and treatment of delinquency. Prerequisite: SOCI 80.101.

80.392 POPULATION AND ECOLOGY (3) Social, economic and political problems related to changes, distribution and movement of population; analysis of contemporary population trends in the U.S. and the world. Prerequisite: SOCI 80.101.

80.402 SOCIAL MOVEMENTS (3) General, specific and expressive movements; the forces producing change; the manner in which new social organizations are formed and established. Prerequisite: SOCI 80.101.

80.403 COLLECTIVE BEHAVIOR (3) Study of historical and contemporary major unstructured and semi-structured situations; crowds, mobs, riots. Prerequisite: 80.101.

80.406 SOCIOLOGY OF EDUCATION (3) Sociological analysis of education as a basic social institution; formal and informal organizations of education systems; relationship to socialization; major social trends in education; concept of academic freedom. Prerequisite: SOCI 80.101.

80.407 SOCIOLOGICAL THEORY (3) Major systems of sociological theory; the works, assumptions, and workings of major European and American schools. Prerequisite: 80.101.

80.408 ADVANCED SOCIOLOGICAL THEORY (3) Critical analysis of emerging theoretical schools. Attention will be given to contemporary theoretical problems. Prerequisites: 80.101 and 80.407.

80.410 SMALL GROUPS (3) Formal and informal action in small groups generally characterized by face-to-face interaction; emphasis on leadership, group dynamics and opinion formation. Prerequisite: SOCI 80.101.

80.457 SOCIAL DEVIANCE (3) Deviance as an aspect of social living; the problem of understanding conformity and deviance; identification of deviants; society's response to deviant behavior. Prerequisite: SOCI 80.101.

80.485 SEMINAR IN SOCIOLOGY (3) Exploring and analyzing major areas of sociology. For senior students with a major in sociology. Prerequisite: SOCI 80.407 and consent of instructor.

80.495 RESEARCH METHODS (3) A consideration of methodology of sociological research; the various steps in conducting research projects, from statement of the problem to final analysis of data. Prerequisite: SOCI 80.101 and PSYC 70.110.

80.497 SPECIAL RESEARCH PROJECT (2-4) Directed study and research on an individual basis. Prerequisites: Sociology major, 80.101, and consent of instructor.

80.499 INDEPENDENT RESEARCH (3) Supervised research and sociological investigation leading to preparation of a research project or a supervised laboratory experience in a social agency. For senior students with a major in sociology. Prerequisite: SOCI 80.495 and consent of department chairman.



SPEECH AND DRAMA

Professors: A. BREWINGTON, R. GILLESPIE, T. SMITH (*Chairman*), WALLACE

Associate Professor: T. BREWINGTON

Assistant Professors: BOSLEY, MANLOVE, SCHWARTZ, STONE

Instructors: BAKER, DWIN, KEANE, MORELL, NYKODYM, SCORGIE

The curriculum in speech and drama is organized to provide learning and training in the communication arts and sciences. The programs of study are designed to provide, in cooperation with other departments, a broad liberal education as well as special professional training with emphasis placed upon acquiring knowledge as well as skill. Students in speech and drama may choose one of these five programs of study: (1) a general major in Speech and drama, including a teaching major; (2) a major in public address; (3) mass communications (journalism, broadcasting, film); (4) a major in speech pathology and audiology and; (5) a major in theater arts.

Students who wish to qualify for any of the five programs in speech and drama must register with the chairman of the Speech and Drama Department. Students who wish to major in theater arts or mass communication must also register with the Director of Theater or the coordinator of mass communications. Students who wish to major in speech pathology and audiology must also register with the Director of the Speech and Hearing Clinic. Students majoring in speech and drama should register as soon as possible in their college careers, preferably early in their freshman year and certainly no later than the beginning of their sophomore year. Transfer students must register during their first semester at the College.

Transfer students are required to take twenty hours in residence in their major area.

The department administers a platform examination in the speech and drama student's junior year. Department approval is necessary for the student to continue the major in his senior year.

GENERAL MAJOR IN SPEECH AND DRAMA FOR LIBERAL ARTS

The student must complete 36 semester hours in speech and drama courses. In addition, he is urged to complete satisfactorily a minor program of advanced course work in an area closely allied with the field of speech

and drama, but chosen from courses offered in a department other than Speech and Drama. The minor program should be chosen with the advice and approval of the student's Speech Department adviser.

TEACHING MAJOR IN SPEECH AND DRAMA

This program prepares the student for teaching speech and dramatics in high school. It allows the student a wide choice in the development of his special aptitudes and interests in general speech, but a minimum program is required of all teaching majors to satisfy the demands of academic standards and certification for teaching speech in the schools of Maryland.

A future speech teacher should consult his speech department adviser for guidance in the selection of his electives and his minor program of studies. A teaching minor is generally expected of all students in the secondary education program.

The course of study for the teaching major follows the program of the general major but requires, in addition, a course in speech education for professional preparation. The prospective speech and drama teacher in the high school should also complete the required courses in secondary education in order to certify for teaching.

THE CURRICULUM FOR A GENERAL MAJOR OR A TEACHING MAJOR

Thirty-six semester hours are required as follows:

Required of all majors: 12 semester hours

1. 84.101 Fundamentals of Public Speaking; 84.303, Advanced Public Speaking; 84.106, Voice and Diction; 86.103 Introduction to the Theater; 84.310 Phonetics of American English.
2. Advanced courses selected from two groups of courses — 18 semester hours.
 - (a) Nine semester hours chosen from the following: 84.216, Group Discussion; 84.221, Oral Interpretation of Literature; 84.231, Argumentation and Debate; 84.249, Forensics; 84.250, Forensics; 53.261, Basic Television Techniques; 84.302, Persuasion; 53.215, Business and Professional Speaking; 84.320, Readers Theater; 84.249, Forensics; 84.250, Forensics; 53.361, Advanced Television Techniques; 84.405, American Public Address; 84.406, British Public Address; 84.432, Coaching and Management of Forensics; 84.403, Classical and Modern Rhetoric; 84.395, Independent Study in Oral Interpretation; 84.495, Independent Study in Public Address.
 - (b) Minimum of four semester hours from the courses in dramatics, to include: 86.211, Theatre Production.

3. Six semester hours to complete the major program chosen from the following groups:
 - (a) Three semester hours chosen from the following: 87.301, Speech Pathology I; 87.241, Introduction to Audiology.
 - (b) Three semester hours chosen from the following: 30.312, 30.313, World Drama; 30.415, 30.416, Shakespeare; 30.321, Modern Drama; 30.319 English Medieval and Renaissance Drama; 30.320 English Drama from Restoration to Shaw; 86.105, 86.106 Theatre and the Humanities; 53.263, 53.264 History and Aesthetics of the Film.
 - (c) Three semester hours chosen from the following: 53.211 Communication Process; 87.105, Speech and Language Development, 84.213, Semantics; 84.385 Sociology of Mass Communication; 84.402, Speech Science; 84.421, Experimental Phonetics. The student who prepares to teach in the high school is also required to complete 84.379, Teaching Speech and Drama in the Secondary School.

MAJOR IN PUBLIC ADDRESS

This program is designed to allow the student to pursue a depth study in the area of rhetoric and public address; i.e., the theory and practice of speech-making. This study includes the scientific nature of the speech process, theories of interpersonal communication, introduction to the speech arts of discussion, debate, oral interpretation of literature, and persuasive speaking, and the history and criticism of public speaking. The program is designed for the student interested in teaching, coaching, and research in speech communication. It also serves as excellent preparation for a career in business or government.

THE CURRICULUM FOR A PUBLIC ADDRESS MAJOR

Thirty-six semester hours are required as follows:

1. Required of all majors: 12 semester hours, 84.101, 84.201, 84.303, 86.103
2. Advanced courses selected from three groups of courses — 18 hours:
 - (a) Six semester hours chosen from the following: 84.216, 84.231, 84.249, 84.250, 84.349, 84.350, 84.432.
 - (b) Six semester hours chosen from the following: 84.221, 84.261, 84.361, 84.320

- (c) Six semester hours chosen from the following: 84.302, 84.385, 84.402, 84.403, 84.405, 84.406, 84.495
- 3. Six semester hours to complete the major program chosen from courses directed more specifically toward the students vocational objectives with the advice and consent of the student's speech department adviser.

MAJOR IN SPEECH PATHOLOGY AND AUDIOLOGY

Students who major in this area pursue a course of study which prepares them (a) to do clinical work in public schools, in colleges, in medical and paramedical institutions, (b) for graduate study, (c) for certification by the Maryland State Department of Education, (d) and partially meets requirements for A.S.H.A. Majors in this program participate in the College Speech and Hearing Clinic and in the public schools. This program is supplemented by courses from the Department of Psychology and the Department of Education.

It is recommended that students interested in declaring a major in this area should do so as soon as possible and preferably no later than the end of the first semester of the sophomore year.

CURRICULUM IN SPEECH PATHOLOGY AND AUDIOLOGY

The Department proposes the following curriculum for the undergraduate who wishes to major in speech pathology and audiology and meet certification requirements as a speech and hearing clinician in the public schools. The requirements for the major are:

1. Satisfactory completion with a grade-point average of 2.5 or better of 36 semester hours of speech pathology, audiology, related technical and scientific content courses, and clinical practice in speech correction.

General requirements are: 87.105, Speech and Language Development; 87.301, Speech Pathology I; 87.308, Speech Pathology II; 87.241, Introduction to Audiology; 84.310, Phonetics of American English; 87.304, Speech Correction I; 87.309, Speech Correction II; 84.402, Speech Science; 87.487, Clinical Practice in Speech Correction; 87.488, Clinical Practice in the Public Schools. (Those wishing to pursue a program leading to a B.S. in Speech Pathology and Audiology without meeting state certification requirements, should take 84.213, General Semantics in place of 87.309, Speech Correction II and 6 credit hours of 87.487 in place of 4 credit hours of 87.487 and 2 credit hours of 87.488).

The additional six semester hour requirements for the major should

be elected from the following speech courses: 84.106, Voice and Diction; 84.213, General Semantics; 87.305, Stuttering-Etiology and Therapy; 87.343, Clinical Audiology; 87.401, Speech Reading and Auditory Rehabilitation; 87.489, Clinical Counseling in Audiology and Speech Pathology.

2. Satisfactory completion of 18 semester hours of selected courses in psychology and education. (Education is limited to 9 semester hours.) Recommended are: 70.203, Educational Psychology; 70.308, Principles of Learning; 70.304, Psychology of Individual Differences; 70.410, Tests and Measurements; 70.420, Mental Hygiene; 70.460, Introduction to the Exceptional Child.
- The following Education courses are required for dual certification: 26.101, Introduction To Teaching; 26.319 Survey of Education; 27.401, Foundations of Education.
3. Satisfactory completion of 200 clock hours of supervised clinical practice in speech and hearing therapy.

MAJOR IN THEATER ARTS

The major in theater arts is time consuming and physically demanding. Majors must be free to participate in theater activities evenings and weekends.

Participation in the college drama productions is a part of the educational program of theater arts majors.

At the end of the sophomore year, students must be approved individually by the department each semester in order to continue in the program.

Students transferring from other institutions and planning to major in theatre arts at Towson are required to complete a minimum of 20 hours of theatre arts courses in residence at Towson.

THE CURRICULUM

Majors must take a minimum of 36 credit hours in theatre or dramatic literature, including the following required courses: 86.105, 86.106, 86.107, 86.108, 86.221, 86.241, or 86.242, 86.251, 86.331, 86.495 and a minimum of 8 to 10 additional elective hours in theatre to make a total of 36 credit hours.

CURRICULUM FOR A MINOR IN THEATRE ARTS

Any 18 hours in theatre courses approved in advance, as a minor, by the director of theatre.

CURRICULUM FOR A MINOR IN SPEECH AND DRAMA

Students may pursue a minor program in the area of general speech. The department does not offer a minor, however, in the curriculum of speech pathology and audiology.

Requirements for a minor in general speech are the satisfactory completion of 24 semester hours of speech and drama courses including: 84.101 Fundamentals of Public Speaking; 84.106, Voice and Diction; 86.103, Introduction to the Theater; 84.221, Oral Interpretation; 84.310, Phonetics of American English; 84.303, Advanced Public Speaking.

CURRICULUM FOR A MINOR IN PUBLIC ADDRESS

This program is designed to allow the student to develop knowledge and skills in the several areas of communication. It offers excellent background for persons planning careers in law, public relations, business, sales and management, social work, teaching, and many other professions. Flexibility is built into the program so that the needs of students with special vocational objectives may be met.

Requirements for a minor in public address are the satisfactory completion of 24 semester hours of speech courses including: 84.101, 84.106, 84.103, 84.221, 84.305.

MAJOR IN MASS COMMUNICATIONS

This program offers a broad understanding of the processes, functions and responsibilities of mass communications. Development of skills in fact finding, analysis and communication through the mass media is stressed. The program prepares the student for graduate work and offers excellent background for many careers such as law, public relations, business, communications media, sales and management. Flexibility is purposely built into the program so that the needs of students with special vocational objectives may be met.

THE CURRICULUM FOR A MAJOR IN MASS COMMUNICATIONS

Thirty six semester hours are required as follows:

1. Required of all majors: 18 semester hours — 53.151, 53.212, 53.215, 53.253, 53.256, 53.385.
2. Eighteen semester hours of electives chosen from the following courses: 84.211, 84.216, 84.219, 84.221, 53.252, 53.261, 84.320, 53.351, 53.255, 53.258, 53.361, 53.263, 53.264, 53.367, 53.485, 84.495, 53.395.

Requirements for a major in Mass Communications are the satisfactory completion of 36 semester hours of communications courses, including 53.215, 53.212, 53.151, 53.256 53.353, and 53.385.

Communications majors are advised to obtain a broad background in the fine arts, humanities, and social sciences.

MINOR IN MASS COMMUNICATIONS

This program is designed to allow the student to develop knowledge and skills in the several areas of communication. It offers excellent background for persons planning careers in law, public relations, business, sales and management, social work, teaching, and many other professions. Flexibility is built into the program so that the needs of the students with special vocational objectives may be met.

Requirements for a minor in Mass Communications are the satisfactory completion of 24 semester hours of communications courses including 53.151, 53.212, 53.353, 53.385 and twelve hours of electives which are divided as follows:

1. Six credits selected from: 84.203, 53.215, 53.255, 53.256, 53.367.
2. Six credits selected from: 84.211, 84.216, 84.219, 84.221, 53.252, 53.261, 84.320, 53.351, 53.258, 53.361, 53.263, 53.264, 53.395, 53.485, 84.495.

MASS COMMUNICATION COURSES (MCOM)

Lower Division — Undergraduate

53.151 JOURNALISM IN A FREE SOCIETY (3) Examination of the role of journalism in the mass communication process and its significance in a free society. Prerequisite: English 30.102.

53.211 COMMUNICATION PROCESS (3) Introduction to the communication process with emphasis on the functions of language and the problems of responsibility in communication.

53.212 INTRODUCTION TO FILM & BROADCASTING (3) Survey of the contemporary film, television and radio media.

53.215 BUSINESS AND PROFESSIONAL SPEECH (3) The student will participate in various types of speeches and study discussion, conference techniques, and parliamentary procedure.

53.252 HISTORY OF JOURNALISM (3) Critical study of the development of the English language press; emphasis on the American press and its role in the political and economic progress of this country.

53.255 NEWSWRITING (3) Introduction to newswriting from the standpoint of style, structure and readability. Prerequisite: 53.211.

53.256 FEATURE WRITING (3) Preparation of long and short articles, editorials, and news features.

53.258 NEWS EDITING AND COPYREADING (3) Practice in editing, headline writing, page make-up and use of pictures and type in newspapers, and editing copy for use on radio and television. Prerequisite: Eng. 30.102.

53.261 BASIC TELEVISION TECHNIQUES (3) History of television practices in the United States and the study of writing production and performance in various areas of commercial and educational television.

53.263 HISTORY OF THE FILM TO THE PRESENT (3) Survey of the Motion Picture from its conceptions to the distribution of sound films.

53.264 AESTHETICS OF THE FILM (3) Survey of Film theory and aesthetics of silent, sound and avant-garde motion pictures. Prerequisite: 53.263 or consent of instructor.

Upper Division — Undergraduate and Graduate

53.351 PUBLIC OPINION AND THE PRESS (3) Journalistic aspects of public opinion and propaganda; the impact of mass communications media on the formation of public opinion. Techniques of polling and testing public opinion.

53.353 PUBLICITY AND PUBLIC RELATIONS (3) Provides an awareness and understanding of public relations activities. Students learn publicity techniques and how to organize campaigns.

53.361 ADVANCED TELEVISION TECHNIQUES (3) Advanced techniques in television production and performance for commercial and educational television. Major emphasis on directing. Prerequisite: 53.261 or consent of instructor.

53.367 TELEVISION WRITING (3) Training and practice in writing commercials, documentaries and plays for the specific medium of television — commercial and educational. Prerequisite: Eng. 30.102, 30.204.

53.385 MASS MEDIA IN MODERN SOCIETY (3) Includes study of structure and function of mass media plus analysis of content, audiences and effects of the media.

53.395 INDEPENDENT STUDY IN FILM AND BROADCASTING (1-6) Independent study in selected areas of film and broadcasting through directed readings, projects, papers, or seminars. Open by invitation of the department to qualified students. Each semester.

53.475 FILM WORKSHOP (3) Designed primarily to provide experienced or future teachers with background about film so that they may better help pupils to become informed about and to develop critical reactions to the films they view. Prerequisite: Consent of instructor. First summer session.

53.485 NEWSPAPER WORKSHOP (3) Sponsored by the member newspapers of the Maryland-Delaware Press Association, and Towson State College. Designed primarily to provide public school teachers with background about the mass media so that they may better help pupils to become informed and develop intelligent opinions on current affairs. Students will be expected to take two afternoon field trips. Class limit 100. Prerequisite: Consent of Instructor. (Graduate or Undergraduate Credit.)
Sect. 51 Hours: 9:00 a.m.-1:00 p.m. July 27-August 7 Director: Miss Marlene Stone Assistant Director: Mrs. Phyllis Bosley.

GENERAL SPEECH COURSES (SPCH)

Lower Division — Undergraduate

84.101 FUNDAMENTALS OF PUBLIC SPEAKING (2) Principles and practice of public speaking. Emphasis placed on the informative speech.

84.106 VOICE AND DICTION (3) Analysis of articulatory and vocal usage as they relate to spoken language. Improvement of skills in voice, articulation, and pronunciation.

84.213 GENERAL SEMANTICS (3) The effects of language and symbols upon individual adjustment and maladjustment. Semantic applications in audiology, education, speech pathology, and other arts and sciences. Prerequisite: 84.101.

84.216 GROUP DISCUSSION (3) Theory and methods of group discussion; practice in forums, panels, and other forms of group communication.

84.219 PARLIAMENTARY PROCEDURE (1) Brief analysis of history and philosophy of parliamentary law and study and practice of the procedure for conducting and participating in meetings.

84.221 ORAL INTERPRETATION OF LITERATURE (3) General principles of oral reading and the art of interpretation in poetry, drama, and the short story. Prerequisite: 84.101 or consent of the instructor.

84.231 ARGUMENTATION AND DEBATE (3) Essentials of argumentation; research, analysis, evidence, reasoning, case construction and refutation. Applications in public speaking and in college debate.

84.249-84.250 FORENSICS (1, 1) Practical work in debate, oratory, extemporaneous speaking, and other speech projects. Study of national debate questions, and opportunity to participate in forensic activities or a Speaker's Bureau. Prerequisite: Consent of Instructor.

84.259-84.260 FORENSICS (1, 1) Refer to 84.249, 84.250 for course description. Prerequisite: 84.249-84.250 and consent of instructor.

Upper Division — Undergraduate Only

84.375 SPEECH IN THE ELEMENTARY SCHOOL (3) A study of speech needs of the elementary school child and current methods and materials used by the classroom teacher in meeting needs.

84.379 TEACHING SPEECH AND DRAMA IN THE SECONDARY SCHOOL (2) Problems, materials, methods and techniques in specific speech instruction areas; integration of speech and drama in co-curricular school activities. Open only to students in the student teaching block.

Upper Division — Undergraduate and Graduate

84.303 ADVANCED PUBLIC SPEAKING (3) Principles of speech composition and organization. Study of manuscript, extemporaneous and impromptu speaking. Principles and application of speech analysis and criticism. Prerequisite: 84.101 or consent of instructor.

84.304 PERSUASION (3) Rhetorical and psychological principles of influencing individuals and groups; application of persuasive principles in speaking performance; analysis of the use of persuasion in formal and informal communication. Prerequisite: 84.203 or consent of instructor.

84.310 PHONETICS OF AMERICAN ENGLISH (3) Analysis of speech sounds of American English and the use of phonetic symbols to record them. Emphasizes ear training, phonetic transcription, and language recordings. Prerequisite: 84.101.

84.320 READERS THEATER (3) Oral interpretation of selections from dramatic literature and individual and group reading. Includes principles of selecting, cutting, and programming in literature. Prerequisite: 84.221 or consent of instructor.

84.395 INDEPENDENT STUDY IN ORAL INTERPRETATION (1-6) Independent study in selected areas of oral interpretation through directed readings, projects, papers, or seminars. Open by invitation of the Speech Department to qualified students. Prerequisite: 84.221, invitation of the Speech Department and consent of chosen instructor.

84.402 SPEECH SCIENCE (3) Lectures, readings, and demonstrations presenting the structure and function of the physiological systems involved in respiration, phonation, resonance, and articulation. Fundamentals of the physiology of the speech mechanism and the physics of sound transmission. Prerequisite: 84.310.

84.403 CLASSICAL AND MODERN RHETORIC (3) Survey of rhetorical theory from Isocrates to contemporary communication theorists. Particular attention is given to Aristotle, Cicero and Quintillian. Designed to develop standards of rhetorical criticism.

84.405 AMERICAN PUBLIC ADDRESS (3) History and criticism of two centuries of public address in the United States, the great speakers, their historical environment, their beliefs and effects on American life. Prerequisite: 84.303 or 40.221 or consent of instructor.

84.406 BRITISH PUBLIC ADDRESS (3) Public address in Great Britain, the great speakers, their historical environment, their beliefs and effects on American life. Prerequisite: 84.303 or 40.121 or consent of instructor.

84.421 EXPERIMENTAL PHONETICS (3) An advanced course in the study of Phonetic Science. Concerned with the application of experimental methods to study and research in voice and phonetics, especially spectrographic analysis. Includes critical review of research literature in Scientific Phonetics. Prerequisite: 84.310 or consent of instructor.

84.432 THE COACHING AND MANAGEMENT OF FORENSICS (3) 2nd semester of even-numbered years only. Problems of organizing, financing, and directing the forensic program in schools and colleges. Coaching, schedules, and techniques for debate and individual speech events. Completing philosophies of forensics and secondary school and college-level forensic organization are studied.

84.495 INDEPENDENT STUDY IN PUBLIC ADDRESS (1-6) Independent study in selected areas of public address through directed readings, projects, papers, or seminars. Open by invitation of the Speech Department to qualified students.

THEATRE ARTS COURSES (THAR)

Service Division

86.025 (025) DRILL IN MOVEMENT FOR THE STAGE (0) Analysis of individual problems in movement for the stage, and drill in corrective exercises.

86.026 (026) DRILL IN VOICE FOR THE STAGE (0) Analysis of individual problems in voice for the stage, and drill in corrective exercises.

86.027 (027) THEATRE MANAGEMENT (0) Organization and control of the business, box office, house and publicity programs of the theatre. Prerequisite: None — offered on demand.

Lower Division — Undergraduate

86.103 (205) INTRODUCTION TO THE THEATRE (2) Theatrical experience through study of the various types, styles, and production processes of the theater. Theater as a public art and its relationship to our culture.

86.105 () THEATRE AND THE HUMANITIES I (3) History of the Theatre and its relation to the Arts and Sciences. Greek to Medieval period. Meets three periods for lecture and one period for discussion.

86.106 () THEATRE AND THE HUMANITIES II (3) History of the Theatre and its relation to the Arts and Sciences. Renaissance period. Meets three periods for lecture and one period for discussion.

86.107 () THEATRE AND THE HUMANITIES III (3) History of the Theatre and its relation to the Arts and Sciences. Age of Reason and Romantic period. Meets three periods for lecture and one period for discussion.

86.108 () THEATRE AND THE HUMANITIES IV (3) History of the Theatre and its relation to the Arts and Sciences. Age of Reason and Romantic period. Meets three periods for lecture and one period for discussion.

86.211 THEATRE PRODUCTION (4) A survey of acting, directing, technical theatre techniques and resources for the school and community theatre. Students will be expected to participate in the production crews for the college plays. Prerequisite: 86.201.

86.221 (270) ACTING I (3) Theory and practice of acting. The development of the actor's imagination and techniques through improvisations, pantomimes, exercises, and simple scenes.

86.231 () MIME I (3) Basic techniques of the art of Mime. Exercises and work in images and illusions. Three credit hours, four contact hours.

86.232 () MIME II (3) Improvisations with images and illusions. Three credit hours, four contact hours.

86.241 (250) COSTUMING I (4) Study of costume the ancient Egyptian civilization to the Renaissance. Costume design and construction. Work on crews for college drama productions.

86.242 (251) COSTUMING II (4) Study of costume from the Neo-Classical period to the present. Costume design and construction. Work on costume crews for college drama productions.

86.245 (229) STAGE MAKE-UP (1) Survey of materials and study of theories and techniques of stage make-up. Class meets for two hours per week.

86.251 (280) STAGECRAFT (3) Technical aspects of play production including scene construction, scene painting, property building and stage lighting. (Work on technical crews for college drama productions required.)

Upper Division — Undergraduate and Graduate

86.307 (390) THEATRE ARTS FOR CHILDREN (2) Technique and theory of playmaking for children. Participation in story telling, story dramatization and production, improvisation, rhythms, pantomime, and puppetry.

86.321 (375) ACTING II (3) Theory and practice of acting. Work in role analysis and character building. Prerequisite: 86.221 or consent of instructor.

86.331 (370) PLAY DIRECTING I (3) Fundamentals of play directing through exercises, directorial play analysis and project in directing a contemporary one-act play. Prerequisite: 86.205 and 86.221 or consent of instructor.

86.355 (360) STAGE LIGHTING (3) Theory of light and electricity with emphasis on the planning of light plots. Aesthetic effort of stage lighting and problems of lighting small stages with minimum equipment. Prerequisite: 86.251 or consent of instructor.

86.361 (380) DESIGN FOR THE STAGE (3) Theory and practice of designing scenery for the stage. Includes a study of the relationship of the set design to the script and other elements of production; and examination of research techniques in preparation for scene designing and practice in designing scenery for many styles and types of drama. Prerequisite: 86.251 or consent of instructor.

86.371 THEATRE GAMES I (1) Exercises in acting designed to develop the individual's creativity and encourage work on personal acting technique. Prerequisite: 86.221.

86.372 THEATRE GAMES II (1) Exercises in acting designed to develop the individual's creativity and encourage work on personal acting technique. Prerequisite: 86.221.

86.401 (401) THEATRE AS A PROFESSION (1) Working conditions, unions, employment opportunities in the theatre. Preparation of professional credentials, audition material, etc. Prerequisite: Theatre Arts major or consent of instructor.

86.431 (470) DIRECTING THE PERIOD PLAY (3) Research techniques and directorial approaches to period drama. Individual directing projects of scenes from representative period dramas. Prerequisite: 86.331 or consent of instructor.

86.441 (451) COSTUME DESIGN (3) Study of the theories, principles, of costume design and practice in designing costumes for the stage. Including a study of the relationship of color, texture, and historical period to the script and style of a theatrical production. Also practical use of costume research techniques in preparing designs. Experience in designing costumes for many historical periods and styles of plays.

86.487 () PROFESSIONAL THEATER SEMINAR (12) A semester's internship in a resident theater company. For majors only. Prerequisites: Approval of director of theater.

86.495 (490) PROBLEMS IN THEATER I (1-3)

86.496 (491) PROBLEMS IN THEATER II (1-3) Independent study of an academic or creative nature. For majors only. Prerequisites: Approval of plan of study by instructor and director of theater.

86.497 (492) PROBLEMS IN THEATER III (1, 2 or 3)

86.498 (493) PROBLEMS IN THEATER IV (1, 2 or 3)

SPEECH PATHOLOGY AND AUDIOLOGY COURSES (SPPA)

Service Division

87.091 (090) CORRECTIVE SPEECH (0) Speech correction and improvement for students who have defective speech. Students who register for the course must pass it before they begin practice teaching.

Lower Division — Undergraduate

87.105 SPEECH AND LANGUAGE DEVELOPMENT (3) Analysis of normal speech and language development, including the phonetic, semantic, and syntactic elements. Physiology of speech and language learning. Observation will be required.

87.241 INTRODUCTION TO AUDIOLOGY (3) Anatomy, physiology and pathologies of the hearing mechanism. Symptoms and causes of hearing disorders. Pure tone air conduction testing and screening methods. Observation and practice will be required.

Upper Division – Undergraduate and Graduate

87.301 SPEECH PATHOLOGY I (3) Analysis of etiologies and symptoms in functional and organic speech disorders such as voice problems, articulation, cleft palate and esophageal speech. Observation will be required. Prerequisite: 87.105.

87.304 METHODS OF SPEECH CORRECTION I (3) Methods of treating speech and language disorders. Offered are clinical techniques, demonstrations, and practice in diagnostic procedures. Therapeutic materials will be studied. Observation and participation will be required. Prerequisite: 87.301.

87.305 STUTTERING — ETIOLOGY AND THERAPY (3) Analysis of etiologies, symptoms and therapeutic management of stuttering. Prerequisite: 87.301 or consent of instructor.

87.308 SPEECH PATHOLOGY II (3) Analysis of etiologies and symptoms of speech disorders related to neuropathologies such as cerebral palsy, mentally handicapped, and language learning disabilities associated with speech and listening. Observation and participation will be required. Prerequisite: 87.301.

87.309 METHODS OF SPEECH CORRECTION II (3) Advanced methods of testing speech and language disorders. Practice in clinical techniques and group therapy will be required. General principles of psychology and their application to speech, hearing and language therapy will be reviewed. Therapeutic materials will be studied. Prerequisite: 87.304 and/or consent of instructor.

87.401 CLINICAL AUDIOLOGY (3) This course deals with: audiometric procedures for differential diagnosis of auditory disorders; functional loss; noise; air and bone conduction; masking; and principles of examination and interviewing techniques. Students will be required to observe and participate in audiologic workups. Prerequisite: 87.241 and/or consent of instructor.

87.404 PROFESSIONAL PROGRAMS, PROBLEMS AND RELATIONSHIP (3) Organization and administration of speech pathology and audiology programs in various professional settings; personal, professional and community relationships and responsibilities. Observation will be required. Prerequisite: 87.487 or consent of instructor.

87.407 SPEECH READING AND AUDITORY REHABILITATION (3) Theories, objectives and techniques for the teaching of speech reading, speech conservation and auditory training. Observations and practice will be required. Prerequisite: 87.241.

87.409 SPEECH AND LANGUAGE FOR THE DEAF CHILD (3) Principles and techniques for developing speech and language in the deaf child using whole-word and analytical methods; consideration of multiple handicaps; demonstration and observation will be required. Prerequisite: 87.308, 87.241 and/or consent of instructor.

87.411 SEMINAR/WORKSHOP IN SPEECH PATHOLOGY AND AUDIOLOGY — SPEECH AND LANGUAGE DEVELOPMENT FOR THE SPEECH AND LANGUAGE DEPRIVED (6) Diagnostic, therapeutic and methods for the management of children who are deprived in the areas of speech and language. Prerequisites: Selected juniors, seniors in Speech Pathology and Audiology, or professional experience and/or consent of instructor.

87.487 CLINICAL PRACTICE IN SPEECH CORRECTION (2-6) Clinical observation of and practice in therapeutic procedures with various types of speech, language and/or hearing disorders is the Towson State College Speech and Hearing Clinic. Students may also be assigned a practicum in the Lida Lee Tall School and/or various centers that offer speech, language or hearing therapy, such as hospitals or private agencies. (Credit is for 2 semester hours per semester, except summer.) Prerequisite: 87.308 or consent of instructor.

87.488 CLINICAL PRACTICE IN PUBLIC SCHOOLS (2) Students are assigned to an approved therapy program for observation and practice teaching. The student will earn a minimum of 100 of the 200 clinical clock hours required for certification. Prerequisite: 87.487.

87.489 CLINICAL COUNSELING IN AUDIOLOGY AND SPEECH PATHOLOGY (3) Systems of directive and nondirective counseling utilized by speech and hearing clinicians for the management of organic and nonorganic disorders. Techniques of interviewing, case history recording, and the conditioning of semantic reactions through interpersonal interaction. Prerequisites: 87.301 and 87.308.

ADMINISTRATIVE OFFICERS

BOARD OF TRUSTEES

Mathias J. DeVito, <i>Chairman</i>	Baltimore
Elaine C. Davis	Baltimore
J. Carson Dowell	Cumberland
Victor Frenkil	Baltimore
A. Harris Grossman	Chevy Chase
Robert C. Murphy	Towson
H. Gray Reeves	Salisbury
James A. Sensenbaugh	Frederick
Robert B. Watts	Baltimore

GENERAL ADMINISTRATION

James L. Fisher, B.S., M.S., Ph.D.	<i>President of the College</i>
Charles A. Haslup, B.S., M.Ed. ..	<i>Assistant to the President and Associate Professor</i>
William A. Carey, B.S.	<i>Director of College Relations</i>

ACADEMIC ADMINISTRATION

Kenneth A. Shaw, B.S., M.Ed., Ph.D.	<i>Dean of the College and Associate Professor</i>
Joseph W. Cox, B.S., M.A., Ph.D.	<i>Associate Dean of the College and Associate Professor</i>
Wilfred B. Hathaway, B.S., M.A., Ph.D.	<i>Director of Graduate Studies and Professor</i>
Charles C. Onion, B.S., B.M., M.A., Ph.D.	<i>Director of Summer Session & Evening College and Professor</i>
Michael L. Mahoney, B.S., M.A.	<i>Director of Admissions</i>
Gerard A. Sartori, B.A.	<i>Registrar</i>
Robert E. Wall, B.S., M.A., Ph.D.,	<i>Director of Institutional Research and Evaluation and Assistant Professor</i>

Billy D. Hauserman, B.S., M.Ed., Ed.D.	<i>Director of Teacher Education, and Professor</i>
Norman L. Sheets, B.A., M.S., Ed.D.	<i>Chairman, Division of Health and Physical Education</i>
David Cornwaite, B.S., M.A.	
	<i>Principal of Lida Lee Tall School and Associate Professor</i>
Julius Chapman, B.S., M.Ed.	<i>Coordinator of Towson's Opportunity Program</i>
Everett Griner, B.S.	<i>Associate Director of Admissions</i>
F. Wayne Sigler, B.S.	<i>Assistant Director of Admissions</i>
Edwin F. Sasaki, A.B., M.A., Ed.D.	<i>Associate Registrar</i>
Donald Dean, B.S.	<i>Assistant Registrar</i>
Anthony S. Witkowski, B.S.	<i>Counselor for Summer Sessions & Evening College</i>
William F. Reuling, B.S., M.A.	
	<i>Counselor for Summer Sessions & Evening College</i>
Neil R. Hopkins, B.S., M.S.	<i>Assistant Director of Research and Evaluation</i>

LIBRARIANS

Dorothy W. Reeder, A.B., B.S., M.A. in L.S.	<i>Director, Albert S. Cook Library</i>
Dorothy Chow, B.A., M.S. in L.S.	<i>Librarian</i>
Louise H. Forshaw, B.A., M.S. in L.S.	<i>Librarian</i>
Eleanore Hofstetter, B.S., M.S. in L.S., M.A.	<i>Librarian</i>
Margaret Huang, M.S., L.S.	<i>Librarian</i>
Helen B. Kaltenborn, A.B., M.A.	<i>Librarian</i>
Grace M. Kuo, B.A., M.L.S.	<i>Librarian</i>
Jesselyne Lamb, A.M., M.A. in L.S.	<i>Librarian</i>
Susan M. Mower, B.A., M.L.S.	<i>Librarian</i>
Jane A. Parsons, B.A., B.S. in L.S.	<i>Librarian</i>
Richard T. Shotwell, B.A., M.A. in L.S.	<i>Librarian</i>
Robert E. Shouse, B.A., M.S., L.S.	<i>Librarian</i>
Jean R. Tomko, B.A., B.A. in L.S.	<i>Librarian</i>
Marie F. Trogler, B.A.	<i>Librarian</i>
A. Isabel Wilner, B.A., B.S. in L.S.	<i>Librarian</i>
Merle Yoder, B.S.	<i>Librarian</i>
Agnes Zamboky, B.A., M.S. in L.S.	<i>Librarian</i>

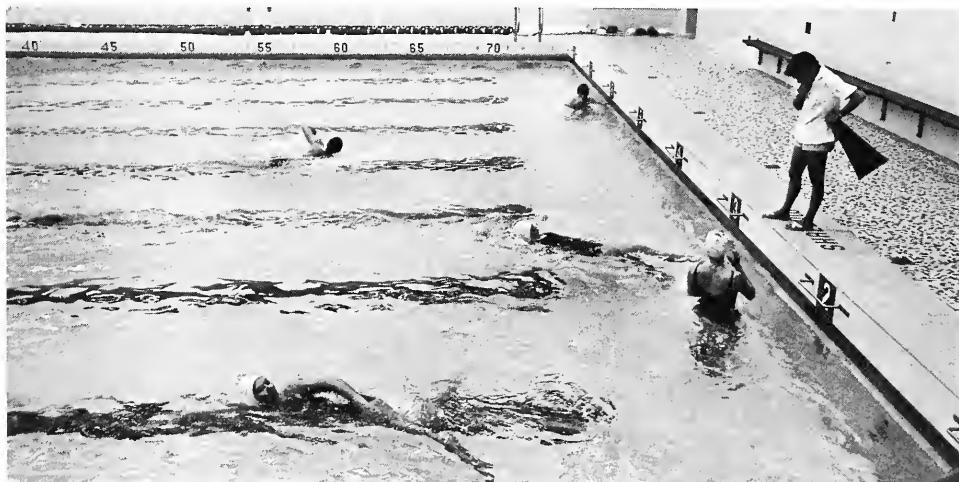
STUDENT PERSONNEL ADMINISTRATION

Orrielle Murphy, B.A., M.A., Ed.D.	<i>Dean of Students</i>
Francis J. LeMire, B.A., M.A.	<i>Associate Dean of Students</i>
Dallas Garber, B.A., Ed.M.	<i>Director of the College Centre</i>
James E. Duffy, B.A., M.A.	<i>Assistant Director of the College Centre</i>
Paul J. Gigley, B.S., M.Ed.	<i>Assistant Director of the College Union</i>

Richard S. Freeman, B.A.	Director of Financial Aids
Marjorie Benjamin, B.A.	Assistant Director of Financial Aids
Susan L. Stecker, B.A., M.A.	Coordinator of Student Activities
Patrick C. Phelan, A.B., M.D.	College Physician
Kent Robinson, M.D.	Director of Mental Health Services
Kenneth S. Russell, B.S., Ed.D.	Director of the Counseling Center
Leon D. Holsey, A.B., M.A.	Counselor
Charles E. Maloy, B.A., M.Ed.	Counselor
Marthe Quinotte, B.A., M.Ed.	Counselor
Bettye Floyd, B.A., M.Ed.	Counselor
Charles A. Haslup, B.S., M.Ed.	Director of Orientation for New Students
Mary Lee Farlow, A.B., M.Ed.	Director of Residence
Craig C. Biggs, B.S.	Assistant Director of Residence
Sally V. Souris, B.S.	Assistant Director of Residence

BUSINESS MANAGEMENT ADMINISTRATION

Wayne N. Schelle, B.A., M.B.A.	Director of Business and Finance
S. Joseph Creel, B.S.	Comptroller
H. William Bauersfeld, Jr., B.S.	Director of Administrative and Auxiliary Services
Leon D. Herring	Physical Plant Supervisor
Ethel Gardner, B.S., Sc.D.	Food Service Manager
Fred G. Bank, B.A., LL.B.	Director of Personnel
Donald N. McCulloh, B.S., M.S.	Finance and Management Analyst
Gene E. Dawson	Security Supervisor



INSTRUCTIONAL FACULTY

*The date in brackets following the listing of each person
is the date of first appointment in the college.*

JAMES L. FISHER, *President*

B.S., M.S., Illinois State University; Ph.D., Northwestern University. [1969]

KENNETH A. SHAW, *Dean of the College, Associate Professor, Sociology*

B.S., Illinois State University; M.Ed., University of Illinois; Ph.D., Purdue University. [1969]

ROBERT W. ABENDROTH, *Associate Professor, Education*

B.A., Bowdoin College; M.Ed., University of Vermont. [1951]

ANITA ADAMS, *Instructor, Sociology*

B.A., Roosevelt University; M.A., University of Chicago. [1969]

PHILIP S. ALBERT, *Instructor, Physical Education*

B.S., University of Arizona. [1968]

CLIFFORD D. ALPER, *Associate Professor, Music*

B.M., M.M., University of Miami. [1960]

MAURITZ G. ANDERSON, *Associate Professor, Biology* ✓

A.B., University of Michigan; M.A., Indiana University. [1963]

HERBERT D. ANDREWS, *Professor, History*

A.B., Bowdoin College; M.A., Ph.D., Northwestern University. [1959]

VINCENT A. ANGOTTI, *Assistant Professor, Health and Physical Education*

B.S., Lock Haven State College; M.S., West Virginia University. [1965]

GOLDEN E. ARRINGTON, *Associate Professor, Music*

B.M., M.M., University of Idaho; Ph.D., University of Texas. [1968]

GEORGIA O. BAKER, *Instructor, Drama*

B.S., University of Kansas; M.A., Stanford University. [1966]

JOHN R. BAREHAM, *Professor, Physical Science* ↗

B.S., State Teachers College at Towson; M.A., Ed.D., Teachers College, Columbia University. [1956]

ROBERT D. BECKY, *Associate Professor and Chairman, Départment of Mathematics* ↗

A.B., Wittenberg University; M.Ed., Miami University. [1959]

BETTY BEINER, *Instructor, Education*

A.B., Goucher College; M.Ed., Johns Hopkins University. [1969]

MAXINE BEHLING, *Assistant Professor, Laboratory School*

B.S., Kent State University; M.A., Teachers College, Columbia University. [1966]

GEORGE A. BEISHLAG, *Professor, Geography*

A.B., Wayne University; M.A., Clark University; Ph.D., University of Maryland. [1954]

ERIC A. BELGRAD, *Associate Professor, Political Science*

B.A., M.A., Ph.D., Johns Hopkins University. [1966]

SUSIE M. BELLOWS, *Associate Professor, Education*

A.B., College of Charleston; M.A., George Peabody College for Teachers. [1961]

LOIS E. BENSON, *Instructor, English*

B.A., M.A., University of Illinois. [1969]

THOMAS M. BENTON, *Associate Professor, Education*

B.A., East Carolina College; Ed.M., University of North Carolina; Ed.D., Duke University. [1969]

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ACADEMIC CALENDAR

Fall Semester for 1971

September 7, Tuesday	Residence Halls open
September 8, 9, 10 Wednesday, Thursday, Friday	Complete Registration and Change of Schedule for pre-registered students and Orientation for new students — late registration by permission of Registrar
September 13, Monday	Classes begin
September 14 thru 17 Tuesday thru Friday	Schedule changes accepted
October 29, Friday	Mid-Semester
November 1, Monday	Mid-Semester evaluations due
November 24, Wednesday	Thanksgiving Holiday after 3:00 p.m.
November 29, Monday	Classes resume
December 14, Tuesday	Last day of classes
December 15, Wednesday	Reading
December 16, Thursday	Final examinations begin
December 23, Thursday	Last day of examinations and semester

January Session — 1972

January 4, Tuesday	Session begins
January 31, Monday	Session ends

Spring Semester 1972

February 1, Tuesday	Residence Halls open
February 2, 3, 4 Wednesday, Thursday, Friday	Complete Registration and Change of Schedule for pre-registered students and Orientation for new students — late registration by permission of Registrar
February 7, Monday	Classes begin
February 8 thru 11 Tuesday thru Friday	Schedule changes accepted

March 24, Friday	Mid-Semester
March 27, Monday	Mid-Semester evaluations due
March 30, Thursday	Spring Vacation begins after last class
April 10, Monday	Classes resume
May 22, Monday	Last day of classes
May 23, Tuesday	Reading Day — Last day to drop a course
May 24, Wednesday	Final examinations begin
May 31, Wednesday	Last day of examination and semester
June 4, Sunday	Commencement

1971-1972 CATALOGUE

In almost all departments new course offerings have been added to the curriculum which do not appear in this bulletin. Please refer to the Schedule Booklet, part III: Curriculum Fall 1971 or to the Department in question.

Changes Relate to the Program of Studies Beginning on Page 64 for Departments Listed

ART

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Students planning a program should know that 12.105, Art in the Culture, is only one of several courses which he may elect to satisfy General Education Requirements. In addition the following may be elected:

- 12.106 Drawing & Painting for Non-Art Majors
- 12.121 Art History: Ancient, Medieval & Renaissance Art.
- 12.122 Art History: Baroque to Contemporary Art
- 12.103 2-Dimensional Design
- 12.206 Architectual Concepts

ARTS AND SCIENCES

Coordinators: Associate Academic Deans

The Arts and Sciences Majors are proposed to offer the student an opportunity to cultivate his interests in the Arts and Sciences, to seek out his own cultural heritage, to pursue his education by following a thematic plan, and to develop a capacity for intellectual adventure and cultural awareness.

There are two majors, each with a thematic option:

MAJOR A — The Liberal Arts and Sciences Major constructed around a "core" discipline in the traditional Liberal Arts and Sciences fields.

MAJOR B — The General Studies Major in the Arts and Sciences constructed around a "core" discipline in General Studies, which incorporates all of the Arts and Sciences.

THEMATIC OPTION — A student may fulfill the requirements for either Major A or Major B by substituting a thematic plan for the "core" discipline. We recognize that it is possible for Major A to be constructed out of Major B. We have made a formal distinction, however, because we wished both to

create a major which preserves the concept of "liberal" arts and sciences in its traditional and widely understood meaning, and also to create a major (B) which offers maximum freedom of choice. In this way, a student who elects the former will carry a distinctive label.

MAJOR A – THE LIBERAL ARTS AND SCIENCES MAJOR

- A. The student must satisfy General Education Requirements.
- B. To declare the major, the student must be a sophomore or junior with a 2.0 CPA.
- C. From the Liberal Arts and Sciences – Art, Biology, Chemistry, English, History, Modern Languages, Mathematics, Music, Philosophy, Physics and Theatre – the student must take a minimum of 54 semester hours of upper division course work. These 54 hours must include work from a minimum of 4 different departments. Eighteen credits must be from the Arts and 18 credits from the Sciences (Mathematics being considered a Science).
- D. At least 18, but no more than 24, of the 54 upper division hours must come from one discipline which shall serve as the "core" discipline in the student's program.

MAJOR B – THE GENERAL STUDIES MAJOR IN THE ARTS AND SCIENCES

- A. The student must satisfy General Education Requirements.
- B. To declare the major, the student must be a sophomore or junior with a 2.0 CPA.
- C. From the Arts and Sciences, which are construed to be the following – Art, Biology, Chemistry, Economics, English, Geography, History, Modern Languages, Mathematics, Music, Philosophy, Physics, Political Science, Psychology, Sociology, Speech and Theatre – the student must take a minimum of 54 semester hours of upper division course work. With the approval of the student's advisor and the appropriate associate dean, courses in departments not listed above may be allowed if these courses are needed to complement the student's program.
- D. At least 18, but no more than 24, of the 54 upper division hours must come from one discipline which shall serve as the "core" discipline in the student's program.

THEMATIC OPTIONS TO THE ARTS AND SCIENCES MAJORS

With the approval of his advisor and the appropriate association dean, a student may elect to substitute a thematic plan for the "core" discipline in either Major A or B. By following this plan the student could develop an academic concentration in areas such as urban studies, American studies, environmental issues, etc.

Except for the following, the requirements will be the same as for Major A or B:

- A. A minimum of 18, but not more than 24, semester hours must relate specifically to a chosen topic or theme.
- B. All course work must be on an upper division level unless the faculty advisor approves the inclusion of some particularly significant course work at the lower division level. For example, a course important to the student's theme may exist only at the lower division level.

BIOLOGICAL SCIENCES

Page 71

Biology Major, second paragraph, insert "Biology 14.113, 14.114, 14.301 and 14.387 may not be included in the basic 30 hours required for the major without permission of the department chairman."

BUSINESS ADMINISTRATION

Page 78 – Requirements for the Major

The Business Administration Department has developed new major requirements. Students starting their business program must adhere to the new requirements. Students already in the program have the option to either follow the old requirements or to elect the major under the new requirements as follows:

Thirty credit hours of business courses are required including:

- 16.101-102 Accounting Principle
- 16.201 Introduction to Business Management
- 16.301 Marketing Management
- 16.303 Financial Management

The remaining 15 credits can be taken in the students area of concentration. Within the Business Administration Major, areas of concentration are available for individual specialization. The program in each area is set up by personal consultation between the student and his advisor. The areas of concentration are: Accounting, Finance, Marketing, Personnel and International Business.

The following courses are also required for the business major but do not count toward the 30 credits: Econ. 24.101, 24.102 and Math 50.231 – (Prerequisites Math 50.115).

For the academic year 1971-1972, the department offers a number of new courses. Students are suggested to check the new courses offered before registering for the fall semester.

CHEMISTRY

Chairman: KASK

This major may be elected by students who intend to do graduate work in chemistry, to teach in secondary schools, to work in industrial, government and hospital laboratories, technical libraries, etc. Students who plan chemically oriented careers such as fundamental and industrial research, medicine, dentistry, pharmacy, veterinary medicine, agriculture, and other allied fields, may also elect this major. Staff members will aid each student in designing a program to meet his special needs.

In addition to the general requirements for a bachelor's degree and the required education courses for those planning to teach in public schools, the following chemistry and supporting courses are required of all chemistry majors: Chemistry 22.103-104 or 101-102, 22.211, 22.231-232, 22.341-342, 22.411, 22.422; Physics 66.221-222; Mathematics 50.273-274. For those who intend to go to graduate school in chemistry, at least two post-physical chemistry courses in chemistry and two semesters of German or Russian are strongly recommended. Additional physics and mathematics courses are also recommended, especially Mathematics 50.337 and/or 50.471.

*A Suggested Schedule for Chemistry Majors**First Year*

<i>First Semester</i>	<i>Credit Hours</i>	<i>Second Semester</i>	<i>Credit Hours</i>
General Chemistry 22.101 or 103.....	4	General Chemistry 22.102 or 104	4
Mathematics 50.115 or 119	3	Mathematics 50.116 or 273	3 or 4
English 30.102 or 104	3	English elective	3
Speech 84.101	2	Elective from General Degree Requirements	3
German 36.101 or Russian 74.101	3	German 36.102 or Russian 74.102	3
	<hr/> 15		<hr/> 16 or 17

Second Year

<i>First Semester</i>	<i>Credit Hours</i>	<i>Second Semester</i>	<i>Credit Hours</i>
Quantitative Analytical Chemistry 22.211	4	Organic Chemistry 22.232	4
Organic Chemistry 22.231	4	Mathematics 50.274 if not taken in Fall, otherwise elective	3 or 4
Mathematics 50.273 or 274	4	Physics 66.222	4
Physics 66.221	4	Electives from General Requirements ..	4 or 5
	<hr/> 16		<hr/> 15 or 17

Third Year

<i>First Semester</i>	<i>Credit Hours</i>	<i>Second Semester</i>	<i>Credit Hours</i>
Physical Chemistry 22.341	4	Physical Chemistry 22.342	4
Remaining General Requirements and electives	12	Instrumental Methods of Analysis 22.411	4
		Inorganic Chemistry 22.422	4
		Health of Physical Education Requirements	1 or 3
	<hr/> 16		<hr/> 13 or 15

Fourth Year

<i>First Semester</i>	<i>Credit Hours</i>	<i>Second Semester</i>	<i>Credit Hours</i>
Advanced Chemistry and other electives	14 to 16	Advanced Chemistry and other electives	14 to 16

Those planning to teach in public schools should schedule the required education courses in the 3rd and 4th years. The electives must be chosen to satisfy the total 128 semester hours College requirement for a degree.

The above is only a suggested schedule. Modifications may be made to suite the needs of the students with the consent of the advisor.

See page 162 of the Towson State College Bulletin, April 1970, for course listings.

GEOGRAPHY*Page 110 — Geography Major*

Thirty credit hours are required as a minimum for the major in geography, of which a minimum of nine credit hours must be selected from courses with a Lower Division number (100-200) and a minimum of twenty one credit hours from Upper Division courses. At least nine credit hours of Upper Division level courses (300-400) must be from those designated as systematic or technique courses.

Geography Minor

Eighteen credit hours are required for a minor in geography, of which a minimum of six credit hours must be selected from courses with a Lower Division number (100-200) and a minimum of twelve credit hours from Upper Division courses (300-400).

Geography Course Prerequisites

Some Lower Division course work in geography or consent of the instructor are general prerequisites for all Upper Division courses, with the exception

of 34.495 (Directed Reading in Geography), which is specified under that course.

MATHEMATICS

Page 129 — Mathematics Majors, Arts and Science Program

All students in an arts and science program who major in mathematics (therefore not necessarily prospective teachers of mathematics) are required to take 50.261, 50.273, 50.274, 50.361, 50.365, 50.373, 50.473 and 50.474 plus enough 300 and 400 level mathematics courses to make a total of 36 semester hours in mathematics. Physics 66.211 and 66.212 or 66.221 and 66.222 are also required.

NURSING

Chairman: SCHWALM

In response to community needs, the Board of Trustees has granted approval for a baccalaureate program in professional nursing leading to the Bachelor of Science Degree. The objective is development of professional nurse practitioners for beginning positions in institutions and/or agencies providing delivery of health services to the community. The proposed curriculum design meets the College's general course requirements, in addition to reflecting a foundational concentration of courses in the biological, physical and social sciences. The upper division courses comprise the nursing major. A variety of health facilities in the immediate and surrounding community provide a contemporary milieu for educational opportunities in the health discipline.

Due to the establishment of a Department of Nursing as an autonomous unit of the College, the referrals to "Nursing" on pages 48, 49 and 71 of the *Towson State College Bulletin 1970-1971* no longer apply.

For further details regarding the requirements for admission to the baccalaureate program and course requirements in professional nursing, contact the Department of Nursing.

PHYSICS DEPARTMENT

Chairmen: NEWMAN and PELHAM

The department offers two major programs, NATURAL SCIENCE and PHYSICS, and many other service courses in liberal art physics and SCIENCE EDUCATION.

Natural Science Major

The program is designed to give a broader view of the sciences than is obtained in a traditional undergraduate major in a single science. This is done at the sacrifice of depth and students should therefore be aware that this major will not prepare them for graduate work in a single science. Course requirements are: Biology 14.101, 105, 109; Chemistry 22.101-102; 211 or 231; Mathematics 50.115; Physical Sciences 64.121-122; Physics 66.211-212 (or 221-222); Biology 14.291 or 14.491 or Physical Sciences 64.401; biological or physical sciences electives (including one field course) for eleven credit hours, for a total of 54 hours in physical sciences, biological sciences and mathematics.

Physics Major

The major program is designed to meet the needs of three groups of students, those planning (1) to be physics teachers in the secondary schools, (2) to enter graduate study in physics, environmental science, mechanics, oceanography, geophysics or other applied physics and (3) to be physicists in industry, government, and other non-teaching professions. All students will be expected to complete a foundation curriculum consisting of Phys 66.221-222, 66.311, 66.321 and two from 66.385-387, Biol 14.101, Chem 22.103-104 (or 22.101-102), and mathematics through Math 50.373. Students in group (1) will need to take two from 66.301, 302, 305-306 and 22 semester hours of education courses. Students in groups (2) and (3) are required to have Phys 66.301, 302, 305, 306, one year foreign language, the other Advanced Laboratory from Phys 66.385-387, Phys 66.401-402, and Phys 66.471-472, completing their requirements for graduation with general electives and such physics electives as may be added when need develops or are available under the Cooperative Educational Program of the State Colleges of Maryland.

Physics Minor

The requirements for a physics minor are 20 credits in Physics courses including Phys 66.211-212 (or 221-222), 301, 311. For further information consult Department Chairman.

Because of the relatively large credit hour requirement for natural science and physics majors, students contemplating these should take at least one or two Chemistry, Mathematics, Biology or Physics courses required for these majors in the freshman year.

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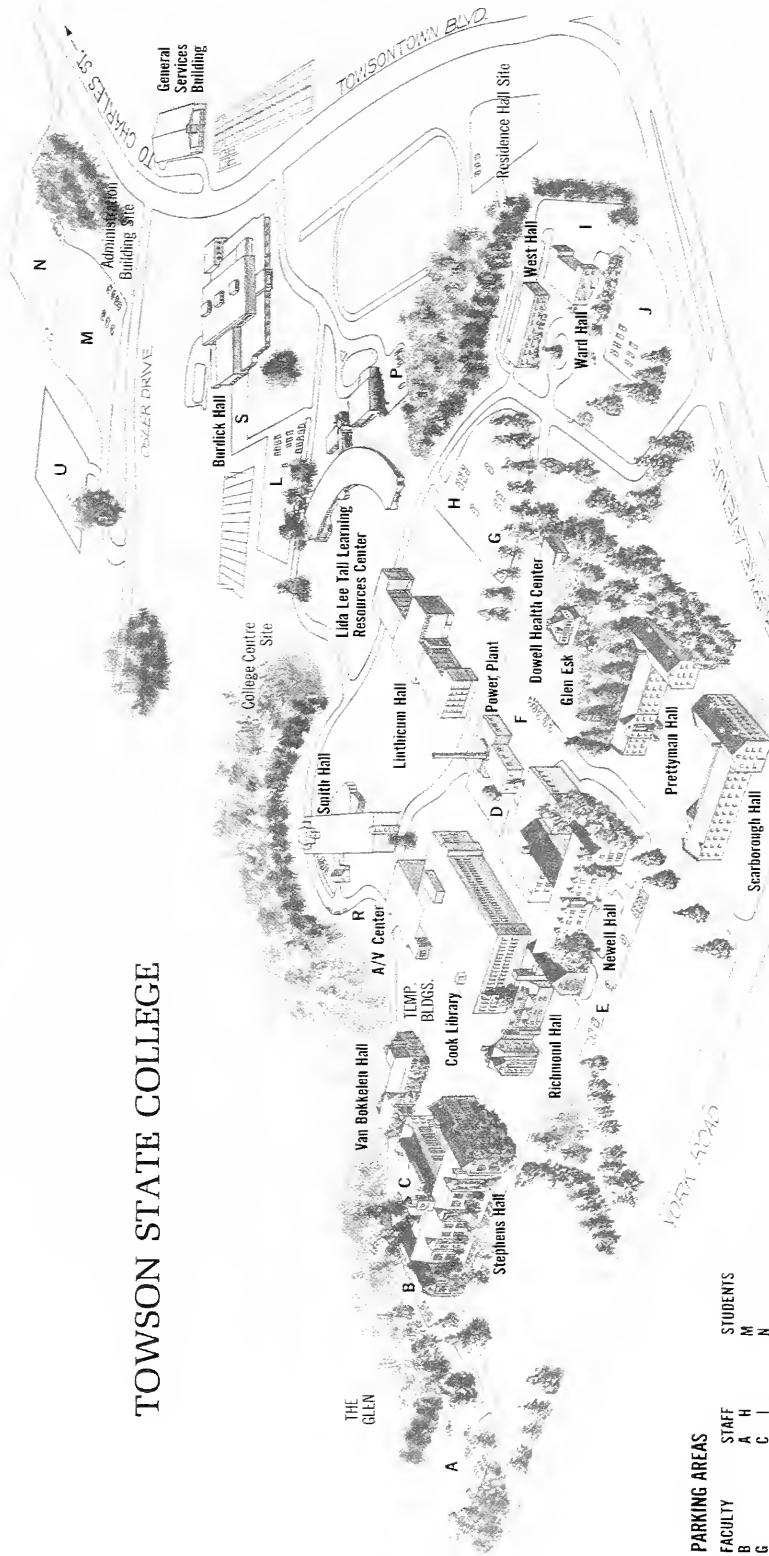
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Office Hours: 8:30 a.m.-5:00 p.m. week days during academic year
 Mailing Address: Towson State College
 Baltimore, Maryland 21204

Specific correspondence should be addressed as follows:

ADMISSIONS	<i>Director of Admissions</i>
BUSINESS	<i>Director of Business and Finance</i>
CURRICULUM AND INSTRUCTION	<i>Dean of the College</i>
GENERAL INFORMATION	<i>President</i>
HOUSING OF STUDENTS	<i>Director of Residence Halls</i>
SCHOLARSHIPS AND FINANCIAL AIDS	<i>Director of Financial Aid</i>
STUDENT AFFAIRS AND WELFARE	<i>Dean of Students</i>
TRANSCRIPTS, ACADEMIC RECORDS, REGISTRATION	<i>Registrar</i>

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